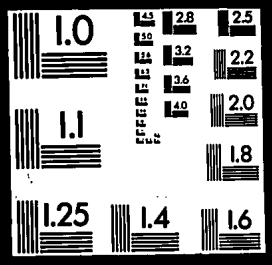
CENTIMETERS



14:1

Thomas A. Edison Papers

A SELECTIVE MICROFILM EDITION
PART V
(1911–1919)

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7500 Old Georgetown Road • Bethesda, MD 20814-6126

Thomas A. Edison Papers
at
Rutgers, The State University of New Jersey
endorsed by
National Historical Publications and Records Commission
18 June 1981

The original documents in this edition are from the archives at the Edison National Historic Site at West Orange, New Jersey.

ISBN 978-0-88692-887-2

THOMAS A. EDISON PAPERS STAFF (2007)

FINANCIAL CONTRIBUTORS

We thankfully acknowledge the vision and support of Rutgers University and the Thomas A. Edison Papers Board of Sponsors.

This edition was made possible by grant funds provided from the New Jersey Historical Commission, National Historical Publications and Records Commission, and The National Endowment for the Humanities. Major underwriting has been provided by the Barkley Fund, through the National Trust for the Humanities, and by The Charles Edison Foundation.

We are grateful for the generous support of the IEEE Foundation, the Hyde & Watson Foundation, the Martinson Family Foundation, and the GE Foundation. We acknowledge gifts from many other individuals, as well as an anonymous donor; the Association of Edison Illuminating Companies; and the Edison Electric Institute. For the assistance of all these organizations and individuals, as well as for the indispensable aid of archivists, librarians, scholars, and collectors, the editors are most grateful.

START

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A Note on the Sources

The pages which have been filmed are the best copies available. Every technical effort possible has been made to ensure legibility.

NOTEBOOK SERIES
NOTEBOOKS BY EDISON
AND OTHER EXPERIMENTERS

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 13
Notebook, N-16-05-10

This notebook was used by Edison during May 1916 for notes on experiments to improve the manufacture of disc records. The entries at the beginning of the book give additional information on experiment 1065E, described in Book No. 12. The subsequent entries pertain to experiments 1077E through1096E; there are also lists of other experiments to be performed. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted, along with the title of the musical selection used in the tests. Also included are notes on "drop tests" in which records were dropped on the blotting pad of Edison's desk to test their fragility. Some notes are in the form of instructions to Sherwood T. (Sam) Moore or Archie D. Hoffman. The front and back covers are labeled "No 13." The pages are unnumbered. Approximately 100 pages have been used.

12	100
11	91
10	83
9	75
8	66
7	58
6	50
5	41
4	33
3	25
2	16
1	8

1065 E May 10th 1916

1522 Blank

4 Fibre
3 Chalk
1 Shellac

First 2 rounds all numbered put away for time tests
May 10/16

700 lbs on the Rubber 600 lbs on the final big press making blank
Printed Two rounds- Hoffmans number for this blank is 1522
Used Standard schedule-
Schedule = Bring to contact needle off pin, When temp reaches 200° fahr put on 850 lbs pressure and hold for 12 min, Cool down Cold. Varnish schedule 3 coats baked one hour after each coat 130° deg fahr Edge. Stand vertical 12 in rack oven has circulation of air, Blank rise at hole reamed flush,

Drop Test.
Dropped flat from heighth of 5 feet on my desk blotter laid on hard floor

#		
1	13 Times	Dropped several edge down but they will not break this way neither will they Chip out
2	7	
3	20 - limit	
4	13	
5	13	
6	8	
7	1	
8	10	They edge OK also number OK-
9	13	
10	5	They buff all right removal of dust improves surface slightly
11	12	
12	10	

Tested Surfaces

Discards	0	These surfaces are fine + as good as moulds will probably give on any blank
dust pass	0	
good	1	
fine	5	
Very good	10	
Very Very good	4	
Tracked	VV- VV- (alt RO) VV- (RO) VV- (RO)	

Varnished by man in music room

1065E Continued.

1522 Standard Sch Press 42	1522 Std Sch Press 42
OK OK	OK OK
OK OK	OK OK
Com OK — Edge 1/16 V	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
Com OK — Veneer 1/16	OK OK
OK OK	Low varnish spot 1/4 Dia Low mould 5
OK OK	OK
OK OK	OK OK
OK OK	OK OK
Spec 005 OK	OK OK
	Spec 010 at edge OK
91%	83%
Jootsie	Jootsie

May 10-1916—

1065 Continued

with so much Chalk we must be careful that our Varnish is not Acid as it will attack the chalk & make CO_2 gas.

After numbering Varnishing and Washing the surfaces have improved Very Much nearly all are "Very V good" and some rated "VVV good"

Eye inspection is all that is required and Mould inspection—

Blanks I measured tonight are a little dished—

3rd Round surfaces fine even without Buffing or washing —

Veneer 3 coats on face of blank is $\frac{1}{1000}$ thick

Soaked 1st Round 1 record which was numbered washed —
Was in water $8\frac{1}{2}$ hours swelled up very bad at Edges + broke sections, but every part of music OK no points or tip holes swelled — The record was very poorly shellaced not shiny — Edge swelled very much more than 1519
Try better Varnishing + retest also get better water proofing

Var in Music room
1522 3rd Dup
42 press

Veneer V Discard
OK
OK
OK
OK
OK
OK
OK
Specs
OK
Specs
Specs
Low varnish
Low Varnish
OK
OK
OK
OK

66%

Tootsie

1065 Varnish in Music R
4th Dup 1522-
Press 42

OK
OK
OK
OK
Spec 050
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
Com OK
Veneer $\frac{1}{16}$
Low spot spec 050

83%

Irish Rose

1065

5th Round

Press 42

OK
OK

Specs start of music
OK

OK
OK

Corn Edge - V 1/8
OK

OK
OK

OK
OK

Specs 1/2" middle music
" 1/2 op

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

88%

Irish Rose

1065

6th Round.

Press 42.

OK
OK

OK
OK

Specs 3" start of music
OK

OK
OK

Low Varnish
OK

OK
OK

Specs 1" area mould removed
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

95%

Irish Rose

7th Round 2 low moulds
Irish Rose = 162
Dream - #65

10th is due to low blank, probably

* taken off -

8th round 4th should be explained

1065 1522

7th Round Press 42

OK OK
OK OK
OK OK
OK OK

Low mould - Dream 3-65 *
OK

Corn OK — 2 edge 1/16 ✓

Specs - 1 chipping H open #7 mould OK
OK

OK OK — pp in end smooth with press

OK OK

Specs Irish Rose #111
Specs mould OK } op.

OK OK

Specs, Irish Rose * #162 low mould
OK

66 2/3 -
X-LM - 83 1/3

1065 - 1522

8th Round Press 41

Specs - 1" scalloped apex end in music 1/2 in music 1/2 smooth point mould OK
OK

OK OK

Specs area 1" x 3" on music at the end, mould OK
OK

Spec
Spec } op both ⅓ Phenomenon + just at start of music

OK OK

bad feed line 1/2 long - also big area
OK Specs in music

Specs - 1/2 scalloped junction smooth point + music towards Label chipping Hope 63
OK

OK
2 Spots - 1/2 right angles to each other - both next to Label - Chauncey 32

OK OK

Spec 1/2 } op A Dream 87 spot
" 1/2 } 1/2" from end music mould 87 only shade low

OK OK

OK OK injury spec in mould
OK

41 2/3

9th Round 1522 Press 42 - Fresh Rose

OK
OK

OK
mould not low
Specs 3/4 area, Center 1/2" in from End music Rosary 14

OK
OK

OK
OK

Streak on smooth at end music FreshR 141 - mould seam flat
OK

OK
OK

Just for today # 28
Spot 1/2 End music mould not low
OK

Spot 3/4 x 1 1/4 last end music - Just for today 63
OK

OK
OK

OK
OK

OK
OK

Discard Var V to feed line Mold Rack - 56
OK

58%

10th Round 1522 press 41

OK
OK

OK
OK

OK
OK

Discard Veneer V $\frac{1}{16}$ from feed line.
OK

OK
OK

Com
OK
Edge V.

Com
OK
Bad puff out at hole thinkcan fix

Com
OK
Veneer V $\frac{1}{16}$

Torn $\frac{1}{4}$ in from start of music
OK

Discard - Crushed Edge bad -
OK

Discard, Veneer V comes within $\frac{1}{8}$" feed line
OK

OK
OK

66% Jootoie

11th Round 1522 press 42 dot 20
Van Oper B night –

Com OK Edge ⅜" in

Specs on Margin
OK

Spot next label 3/4 dia smooth. Mould ok
OK

Label pulled out at Edge & near hole
OK

OK OK

OK OK

Spot 3/4 dia Next label not in Mould
OK

OK OK

OK OK

OK OK

Discard – blank crushed to within 1/8" of feed line but in place
OK

OK OK

58% Irish Rose

11th Round 1522 presses 42 Cal 20
Van Oper B night –

Com Edge 1/8" in
OK

Specs on Margin
OK

Spot next label 3/4 dia smooth. Mould OK
OK

Label pulled out at Edge & near hole
OK

OK
OK

OK
OK

Spot 3/4 dia Next label not in Mould
OK

OK
OK

OK
OK

OK
OK

Discard – blank crushed to within 1/8" of feed lens but in place
OK

OK
OK

58% Irish Rose

Moore Took # 10 Moon defect
to Examine Mould -

12th Round 1522 Cat 20 Press 42

1 OK OK

2 OK OK

3 OK OK

4 OK OK

5 OK OK

6 Low spot - Low mould - small area
OK

7 OK OK

8 OK OK

9 Com Edge 1/8
OK

10 Big spot 5/8 wide follows Edge of label 1/8 space for 3"
to moon shaped
other side shows light area

10

Good Press, 80%

13th Record 1522 Lot 20 -
Var Opr #4 Nights

1 OK OK

2 OK OK

3 OK OK

4 OK OK

5 OK OK

6 Space on last line on must
OK

7 Space Space | op - last 1/2" of music space 1st 1/4 of music

8 OK OK prints but big oval clear narrow label
+ 1/8" from Music on Opposite side
flush + OK but shows only
dura around - Disc OK

9 OK OK

10 OK OK Prints has big oval clear narrow label
just like No 8 — Disc OK

Com OK Veneer - 1/16

OK OK

83%

Footoie

Note 7 Low mould

14th Round 1522 Lot 20 Press 42
Var Ofer # 4 Nights -

1 OK OK

2 OK OK

3 Specs Center of music - thumb pull out to
Specs 1/2" from end of music 3 of 010 - may be pull out

4 OK OK

5 OK OK

6 OK OK

7 Bare spot actual size 1 1/2 in music Low Mould
OK

OK OK — Dust spot in label + little on smooth

OK OK

OK OK

OK OK

OK OK

Inspt Ross

83 o/o

15th Round 1522 Lot 16 —
Press 41 — Var Opr #3 Nights

1 OK OK
2 OK OK
3 OK OK
4 Com OK Veneer V V V 1/16
5 Big OK Area spots — Center of area 5/8" in from end Music mould ok
6 Spots fair. at end of music mould ok
7 OK OK
8 OK OK
9 OK OK
10 OK OK 1/4 spot at Edge of label.
OK OK
OK OK

83%

Tootsie
#2

16th Round 1522 Lat 16-
Press 42 Van Ofr # 3 nights

15 [redacted] Space Space | op at Edge small
6 OK OK
7 OK OK
8 OK OK
9 OK OK
10 OK OK
11 OK OK
12 Com OK Veneer +
12-

87

Lush Rows

1/16 Plywood 1522 lots 18 -
Press 41 - Apr 3 nights

1 OK OK

Discarded Veneer - probably Crushed under

2 OK -

3 OK OK

4 Com OK Veneer 1/16

5 Com OK Veneer 1/8

6 Com OK

7 Com OK Edge 1/16

8 Com OK Veneer

Note 6 Laminated

17th Record 1522 Leaf 18 Ofer 3 nights
Pieces 41

1 Com OK veneer ½
2 OK OK
3 Com OK Edge V
4 OK OK
5 OK OK
6 OK Spot. 5/8 in from End Music · Loose Mould
7 Com OK Edge
8 Com OK Edge
9 Com OK veneer ½
10 OK OK
Discard – Veneer – think cause to crowded Edge
OK
Com OK veneer

83%

Jootoic

18 Rounds

90 defective surfaces

many ok — of the 90

60% are pull outs —

Can edge donuts

1/4" of 1st feed line —

18th 1522 Lot 18 Oper 3 mylar

Press 42 —

7 Low 1/2" in from end music OK

8 OK OK

9 Low spot 2 of them 5/8" in from end music OK

10 OK OK

11 Specs specs / op 1/2" in last part of music

12 OK OK

50%

Trish Rose 18

NOTE

By studying 12 Records under Micro at point where most of our discards take place which is last 5/8 of music + part of smooth part. I find that contrary to supposed poor print that they are perfectly filled - and that the specs are really PULL OUTS I then went up stairs to ask if they had many click To mould at that particular point, The man said yes

that is the point where most of the sticking takes place, + he had kept an account of them

Hereafter I will get this record for each Round

Arrange Card 1 to 12 + have man mark each mould + position,

4 Rounds on 1519 Varnished in Fred Otto Machine, The only defects were puff outs on the mould,

~~19th Round~~

See book 12

1075 E to 1522 blanks
should have been
put here

4 Rounds fired Ills. Varnuly
with Machine —

83% 66% 100% 58%
pull out the whole trouble

Edges turn up a little
all night in water
but not shellac
just dipped

MG

Notes for Experimenting Etc

1= Get black Var jet black & shiny to
Coat pull outs in Label. the solvent one
that dissolves shellac if possible

2= Rotate a numbered record as the
Edge touches in Kerosene, which
should be absorbed. Then shellac over
this. Try Melted Varnishes —
test in water shellacked & not shellacked

3= Buff several discards until a
satisfactory glaze is attained
when OK Buff One round
of moulds & Continuously print
to see if Pull Outs Clap

4 To stop pull outs, Tap moulds
Edgewise in 4 places
to see if it will not prevent
Pull outs.

5= Have 2 men day & night take
rounds at Random from
dif presses & record same as
I have been doing —

This is ok

Peg Racks work ok

Worked ok

Notes Continued

6 = I wonder if knocking out pin moves moulds + breaks side walls -

7 = in 10 hours 1 Baking Rack will gives 90 records in 10 hours
1 Coat Requiring for 16000 Records 177 Racks for 3 Coats 531 "
if any night work, then reduction in number of racks will be in proportion — find number of rack we have?

8 = Fred Off Thy 4 Rounds with the Twins Between,

9 = Arrange for daily report sent to me of the number of 1519 + 1522 Blanks made daily

Notes Continued

10 Have daily report sent me of number of 1519 & 1520 Records Printed daily -

11= Have daily report of the number of new blank making moulds finished daily +

12= Report daily number of Varnishers by day & night.

20th Round 1522 - 3 Coat baked 1300
Press 41. Oil on Kettel

specs - pullOut End music
ok

OK
OK

Pull outs
pull outs } op

Com Veneer 1/8
OK OK

Com Veneer 1/8
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Discard, Edge
ok

OK
OK

75%

91 without PO.

Jostoia

1522

21st Round 42 Pieces

Edge V Edge
OK

Com OK Edge V just clean up 1/16

Com OK Edge V. not out,

OK OK

OK OK

Bad print } not filled – not of Pull out
Bad print }

Big Pull out } of Rut OK OK dont sound
" " "

OK OK

Bare spot
OK veneer crumpled

OK OK

OK OK small pd

Com OK veneer 1/16

66 2/3

75

Irish Rose

22nd Round 41 Press

~~Pull outs~~
Pull outs cumbear
Pull outs
pull outs "
Pull out — "
OK
Pull outs "
OK
Com OK Edge ok within 1/4"
Com OK veneer 1/8 ok
Com OK Edge 1/8 ok
OK OK
Com OK veneer 1/16
OK OK
OK OK
OK OK

66%

Joolsie

23 Rounds 42 pieces -

Pull outs - Sounds
OK
OK
OK

Pull outs
Pull "
Dont Sound OK
OK
OK

Pull out - Dont sound OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK

45

91%

Trust Rose

Hoffman

Output	1519	1522
5-12-16	1125	1128
	1125	1522
5-13-16	1144	950

1077 E Press 42
1st Round

pullouts pullouts | Dis
Pullouts | Dis
OK
Form-Venee ok | Dis
pullout
Pullout End
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

66- (73)

Fresh Press

2nd Round Press 41

OK OK
Bare spot Mid Music
OK
Pullout
OK
OK OK
OK OK
OK OK
pullouts | Dis
OK
OK OK
OK OK
Corn | Edge
ok
OK OK
OK OK

45%

Tostaia

1077 E

1522

Hoffman Make 24 blanks
without the Hammers

Varnish & Print Req
1522 Schedule

Varnish in Music
Room

Thus Days
40 men
20 day 20 night

1522-

24th Round Press 42 —

Pull out — Discard-Cam bear

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Pull out-Discard, spot very little print

Pull out OK

OK
OK

83%

Irish Rose

1522-

24th Round Press 42 —

Pull out — Discard=Coarse

OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK

Pull out-Discard spot very little print
Pull out OK

OK
OK

83%

Irish Rose

1522

25th Round Press 41
Load 2

OK
OK

OK
OK

Veneer — Discard — warping 3/16
OK

Veneer detached — will clean up OK
OK

Com OK Edge V.

OK
OK

OK
OK

Com OK Edge V.

Pull outs — Discard — Sounds
OK

Pull outs — Discard — "
OK

OK
OK

Pull out poor print
OK

58%

66%

Jastoic

26 Round 42
Press

Pullout | Can't hear (OK)
Pullout " (OK)

(OK)
(OK)

Pullout = Don't Sound (OK)
Pullout = (OK)

(OK)
(OK)

(OK)
(OK)

Barespot — Discard
OK

(OK)
(OK)

(OK)
(OK)

Pullout — Don't Sound (OK)
OK

(OK)
(OK)

(OK)
(OK)

Discard — Edge Cracked
OK

58%

(91%)

Irish Rose

27 Round 41 Press —

Com OK Edge ✓

(OK)
(OK)

Com OK veneer $\frac{1}{8}$

Pullout DUE TO OIL
OK near label
mixes with Var
Roller
Discard — Edge — bad pullout

(OK)
(OK)

Pullout
Pullouts } Don't Sound (OK)
(OK)

(OK)
(OK)

(OK)
(OK)

Com OK Edge $\frac{1}{16}$

Com OK veneer $\frac{1}{4}$

(OK)
(OK)

66

(83%)

Tootsie

28th Run. 1522

42 Press

Com OK — Edge Crushed

Faire Spot Discard

OK

OK OK

OK OK

OK OK

OK OK

Com OK — Edge 1/8 ✓ ✓

Com OK — Edge 1/8

OK OK

OK OK

Discard - Veneer

OK

OK OK

83%

Frank Rose

29th 1522

Press 41

pull out Dout Sound 3 Knots — OK OK

OK

OK OK

OK OK

OK OK

OK OK

OK OK

Com OK — Edge 1/8

OK OK

OK OK

Veneer OK — 1/8

Pull out Discard

Veneer OK —

83 -

91

Joe Fiz

30th. 1522 Note

Press 40 Load 1 S

OK OK

Pull out on wood OK OK

OK

OK OK

Edge Discard

OK

Pull out. Discard

" "

Barespot Discard

OK

Pull out } Discard

Pull out

Com OK Pull out - veneer

Veneer - Discard

OK

Veneer Discard

OK

Com OK Edge 1/8 Long

Pull out OK OK OK

33%

50

Dwz check Slow Every Fold

31 — Press 41 Load 2

OK OK

OK OK

OK OK

pull out OK OK OK

OK OK

Com OK Edge 1/8

OK OK

OK OK

OK OK

Pull outs 2 places OK OK OK

OK OK

OK OK

83

100%

Footside

2

32 1522

Press 42 -

OK OK

Pullout Discard
OK

Pullout
Pullout OK OK

Pullout
Pullout Discard

bare spot rim Discard
OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

pullout
" Discard

58% 66%

Fresh Rose

33- 1522

Press 42

OK OK

OK OK

OK OK

Com OK Veneer 1/16

OK OK

OK OK

bare Spot low Var Discard
OK

Pullout
Pullout OK OK

OK OK

OK OK

Com OK Veneer 1/16

Pullout
OK OK OK

75 - 91

Fresh Rose

5-15-16

Hoffmans has

106 Bottom

139 Top plates

He's running 1 leg on 106 but gives no margin to wash

Requires 130 moulds per leg

Press 42-

1 X
2 X
3 X
4 —
5 X
6 X
7 X
8
9
10
11
12

66%

780
139
641

42-
-9-

34- Press 42

Bare spot Discard
OK
OK
OK
OK
OK
OK
OK
Com OK
Veneer 1/16
Pullouts
" "
OK
OK
OK
OK
OK
OK

83%

91

Trash Rose

35- Oiled Moulds AB 5/1

42 Press -

Discard - new label Oil on mould
" " " "
Oil on mould near label
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
Pull out
Pull out
OK
OK

Oil

75

83

Using 5% Sesame in Gasoline -
Dugertit dip in oil + rub quickly over whole oil mould then wipe dry

No advantage

36 Round OIL
Expand
Press 42 Load 2

OK OK
OK pull out big area Discard RO
pull out, (one) Discard
OK
Pull out - (one)
OK
OK OK
Pull out - (one)
OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

66%

Factory

37 — OIL

42 Press
pull out OK
pull out Discard

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
Bare spot Margin
OK
Com OK Edge 1/8
OK OK
pull out, too many sample
OK
pull out
OK
OK OK
OK OK

66%

75

Fresh -

B = 8 Blanks

OK
OK
OK BUT Blank Ckd - pull out load.
1 OK
OK
OK
OK
OK
OK

75%

Jootsie

A = 10 blanks low

OK
OK
OK
OK
Pullout ferro | Dusting OK
OK
Pullout OK
Ferro | ferro | op
OK
OK

70%

OK
80%

Jootsie

1078 E High Tins will do should be made different cut away to get Schedule

1522 blanks Vom by Oles

Machine - Tin Centers all throw - Low Tin 10 mark

A 3.5 cc coat

High Tins mark B

Tins not cut out

10 blank of A 8 blanks of B.

Evidently Tins will do

Think High Tins best

Tits dont choice -

It may be Ferro is a specialty of tins - it may require 1 1/4 @ 1 1/2 Nocero Gelatin Coats baking

Reprints

Press 41

1 OK OK — OK Lightened both OK all

2 pullouts too many snaps Lightening all over inferior too many snaps

3 poor print OK

4 Air — Edge

5 Air — Thin spot Discard OK

6 Bad Print | Dis " "

7 Com OK | Edge + 1/16 — OK Pull thru Lots Idea

8 Pullouts | Discard OK

9 Pullouts | Discard OK

10 pullouts Dis OK

11 OK OK — OK

12 air underneath Dis OK

3 OK 25% OK

Tootsie

2nd Round

41 press —

1 pullouts OK

2 OK OK Too Many snaps out - Diamond breaks the Rice - air Dis

3 OK

4 OK OK OK all over Listens

5 specs " Discard

6 pullouts poor press | Discard

7 OK OK — OK both, Listens

8 snaps " Discard

9 air air | Discard

10 air air "

11 air air "

12 air -

16%

Tootsie

1079E Reprints -

Two rounds. 1522 Prints

Revarnished by Att with Machine - Reg 3 Coats 5.5 CC — baked hour between Each Coat

Trouble is air between first layer & last, it rises up & gives a spot 030 - the diamond Comes along & breaks it

38 Not Ordered

Pieces 41 –

OK
OK
OK
OK
OK
Pull out Loud
OK
Pull out Loud
OK
OK
OK
OK
OK
OK
Pull out, Loud
OK
OK
OK
Pull outs Discard
"
"
OK
OK

66 2/0

Jootaie

39

41 Pieces

OK
OK
OK
OK
OK
OK
OK
OK
OK
Com OK Edge 1/8
OK
OK
Pull out Loud
OK
OK
OK
Com OK veneer 1/8
OK
OK

91 2/0

Jootaie

40

Press 42

OK OK

OK OK

OK OK

Com OK Edge 1/16. v v v

Pull out OK. OK OK

Com OK veneer 1/8

OK OK

OK OK

Barespots - PO OK Discard

OK OK

OK OK

Pullout OK OK OK

75 91

Irish Rose

41 Round 1522

Press 42.

pull out OK OK OK

OK OK

Barespot OK Discard

OK OK

OK OK

Barespot OK Discard

OK OK

OK OK

OK OK

OK OK

OK OK

pull out spaces OK OK OK

Pullouts Pullouts

58. 75

Oiled

42

Press 42

OK OK — 010 of steel hurt mould

OK OK

OK OK

Barespot Discard

OK

OK OK

OK OK

OK OK

Big areas PO — OK OK

OK

OK OK

Low blank or Van

OK

OK OK

OK OK

75% — 83

Frank Rose

Not oiled

43

Press 41

pull out spots veneer — OK OK

Barespot pull outs — ½ Discard

OK OK

OK OK

OK OK

OK OK

pull outs — OK OK

OK

pull outs " " — Dis

OK OK

OK OK

OK OK

OK OK

66% — 83

Jacobsen

42- Not Oiled

Press 41

OK
OK

Pull out | Dis
OK

OK
OK

Bore scratch Dis
Specs

OK
OK

Com Edge V 1/8
OK

OK
OK

OK
OK

OK
OK

pull out
OK

OK
OK

OK
OK

pullout Dis
OK

66 75

Footsie

Reg 43 no oil-

Press 41 Buffs Not Buffed
Note 4411 @ 2-1 4411 2-4
4410-a 1-6 4410 1-21

2+1 1+6 OK OK 4411-10

2x4 1x21 pullouts pullouts Discard

pullouts pullouts Discard

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

pull out " " of Dis Hand ok

OK
OK

OK
OK

75%

Footsie

1080
C Varnish
2nd Round Press 41

Corn OK — Edge 1/8

OK OK

OK OK

OK OK

OK OK

one yellow spec · not heavy · dont break OK OK

air bubble few " " break

bubbles OK · Diamond blks

Bubbles big area " "

" " " "

OK OK

Streak yellow bubbles OK

50%

2" long 3/8 wide at angle — Same Reason for this

NO PULLOUTS

Probably bubbles greatly diminished by a longer bake 3 or 4 hours angle Cast if that works.

Varnish flows out on run of Mould Easy to clean — Mould free of pullouts —

44 1522 Not Oiled
Press 41

OK OK

OK OK

Pullout OK — OK OK

Pullout OK — OK OK

OK OK

OK OK

OK OK

OK OK

pull out OK Discard

OK OK

OK OK

OK OK

75 — 91

Foolish

46 Oiled
42 Press —

Bare squeeze Edge OK

OK OK

OK OK

OK OK

OK OK

OK OK

Pullout OK — OK OK

Pullout OK — OK OK

OK OK

OK OK

pullout (Discard) OK

pullout OK — OK OK

58 — 83

Brush Rose

1080A. Press 41 - 1st Rosiny	A 2nd Press 42 1. Hula	B Hula Press 42	C 41 - Loodq
1 Specs both 3	OK OK	OK OK	OK OK
2 OK OK	Spot — 3 OK	OK one from 2	Com OK Edge 1/16
3 OK OK	OK OK	1 from Venus ok	OK OK
4 Com OK Venus	2 big spots OK 3	Com OK 2 sp	OK OK
5 OK OK	OK OK	specs 1 " 3	OK OK
6 Low Spot 3 OK OK	OK OK	specs OK 3	OK OK
7 Specs — 3 OK	small specs OK 3	OK OK	air phenomena sound fro air
8 bare spot 1/8 OK (3)	spot spot top 3	specs dulls 3 OK	OK OK
9 OK Low Spot 3	spot spot top 3	OK OK	OK OK
10 OK OK	OK OK	spots on lobes 3 OK	OK air allow air OK
11 OK OK	OK OK	Edge Dis OK	OK OK
12 Specs OK 3	specs OK 3		
50% (58)	50%	33	45

for 2nd Round of C see page back

all the discard yellow under micro on machine discard breaks them out

Varnish run out all over the round too much Var will make least 5 cc of this Var

for D Var see book 14 1107

1080 E

Hoffman ~~Ace~~

Make quart of following Varnishes —

A Reg Weld Var 4% Lampblack but make it 1½ para & 8½ 6/4 Mark A

B Quart Weld Var 3½ Lampblack 1½ para 8½ 6/4

C Quart 3% Lampblack 1½ para 8½ 6/4

quart 8½ 6/4 no Lampblack

D Well percent 24 Each Var -

C Note air cause of trouble in this round its different from other rounds of 1019 - Spots all over - round & at these points pull out one spot music thrown up without pull out

Apparently Nothing
in grafting
Blanks or polishing
or Buffing Moulds

1081 E

Press 41 - Having the 2 baffed Moulds

Edison Brushed 12 Varnish
blanks with graphite - used cloth
2 Coats,

pull out Dis Think I dug piece out with this
OK

OK
OK

OK
OK

pull outs OK
pull outs Discard. Not careful check

Pull outs
Pull outs OK
OK

OK
OK

pull outs OK
pull outs Discard

OK
OK

OK
OK

Pull out Discard
OK

Com OK Veneer
Veneer 1/16

OK
OK

58% 66%

Treatise

2nd Round Press 41

OK OK
OK OK
OK OK
Pull outs OK OK OK
OK OK
Veneer 1/4 Descend OK
OK OK
OK OK
OK OK
Com OK Edge 1/8
OK OK
Pull out OK OK OK

75 91%

Tootsie

1082 Moore Expt

1522 - 3 bakes then Edge Coat 3½ radius
or 7 inches, a-Chess is baked

Press 37.

Bare Spot near edge OK
pull outs near Edge OK
pull outs middle music OK
pull outs near end music OK
OK OK
OK OK
OK OK
pull outs pull outs near label
OK OK
OK OK
OK OK
pull outs " "

50% Recd load

2nd Round
Bare Spot ½ Near edge OK
Bare Spot. stout OK
Bare Spot Middle music OK
Bare spot at label OK
pull out OK pull outs descend
OK OK
Pull outs Dis OK
Bare spot ½ in pull outs
OK OK
OK OK
Com OK veneer 1/16
Low Moved 3-50
Bare Spot o/s

33%

See over

Round 2
2nd Round 1082E press 41
pull out to Dis
"
Bare spot Near label (OK OK)
Bare " End Mission
pull out Spec Dis
" "
(OK OK)
(OK OK)
(OK OK)
spec pull out Dis Not Buffed
"
pull out spec — bare spot Buffed
"
(OK OK)
spec pull out
"
pull out Dis
OK
(OK OK)

41% (50)
"

Joals 2

M.

1083 — 1522 —

1st Round Press 41

OK OK

1 side Postn 1

OK OK

1 side Psln 3

OK OK

1 side Psln 3

1 side " 3

OK OK

OK OK

OK OK

OK OK

OK OK

66%

Moore last of varnish
just the apparatus
gave 50% or 37%

Tootsie

2nd Round

42 press

OK OK

OK OK

1 side Postn 3

OK OK

OK OK

1 side postn 1

both side — " 3

OK OK

OK OK

OK OK

OK OK

OK OK

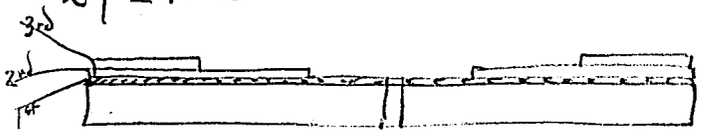
5 in position 3
2 in position 1

75%

Trick Rose

1083E

24 = 1522



3 Coats Varnish as above —

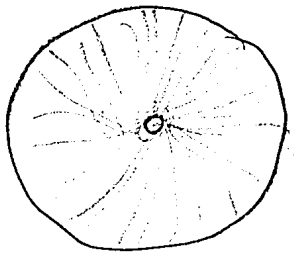
This looks like an improvement,
Think wants Enlarged
hole to give air vent

Made No Ear test
of Discards

1084 E

24 of 1522

Varnished radially —



1st Round

Press 42 - Load 3 -

1 OK OK
2 Snaps ~~OK~~ Snaps Dis
3 Snaps OK Dis too many
4 Snaps too many
5 Snap OK OK OK
6 OK OK
7 Snaps OK OK OK
8 Com OK - Edge 1/8
9 Term " Dis
10 Snaps Dis OK
11 OK OK
12 Com OK - veneer 1/8

41% 58%

Irish Rose.

2nd Round 1522 Lot 3

42 Press

1 OK OK
2 Snaps OK Discard
3 Snaps too many OK
4 OK OK
5 OK OK
6 OK OK
7 Snaps OK
8 OK OK
9 Com OK veneer 1/16
10 Com OK veneer 1/8
11 Lowepost OK
12 Com OK Edge 1/8

66 %

Tootsie

1085 E

~~Two~~ rounds 1522

Change the schedule on this lot this

Bring to Contact + put 200 lbs pressure on then put steam on + when temp gets to 200° deg put 850 lbs on for 12 minutes - Cool Cold

Dont appear to do any good -

1086

41 Press — 2nd Round — 1525 — blank

OK	Specs	3
OK	Spot	3
OK OK		
OK OK		
OK	Spec spot 1½	3
OK	Spec spot 1½	3
	Spec Spot 1½	3
	" " 1½	3
	Spec Spot ½	3
	" " 1"	3
OK	Spec spot	3
OK	Bare spot	3
	Spec Spot 1½	3
	" " 1½	3
OK OK		

25%

1st Round 41 press

Com OK	Edge ¼	
OK OK		
	Spec area 1¼	3
	" " 1¼	3
Com OK	Edge ¼	
	Spec area 1½	3
	" " 1½	3
OK OK		
OK OK		
OK	big spot it went some	3
	specs 2 press op	3
OK OK		
	Spec area 1½	3@2
	" " ½	3@2
OK OK		

58%

1086 E

Hoffman

Make 4 Rounds 48 blanks like 1085 E no hammers but instead of 600 lbs final pressure in big press only give them 500

These 1st 24" were hand

5.1 ¢c for 1st Coat
3.5 the other 2

This will be least 2

Press 39 — Extra load —
This is necessary 7 —
Run Reg —

OK OK

OK OK

pull outs · Discard
" "

pull out OK

OK OK

Com OK. veneer ½

OK OK

pull out OK

OK OK

5 7

85 ~~85~~ 5

1087E Moores Expt

Took 12 1522 blanks
Put at Contact needle off —
When 200° deg reached
Cut off steam — Cooled
down Cold — Took out
5 — The other 7 he
punched Reg again by
putting back in presses
The 5 were 3/4 punched
& came away from mould
surprisingly well although
Vac Not Condensed —
Blanks use were rejects
having spots on them

46 - Reg 1522 Not Oiled
Press 41 - Load 2

1 - Pullout OK (OK OK)
2 - (OK OK) Buffed Mounted
3 (OK OK)
4 pullouts Dis
5 pullouts Dis
6 (OK OK)
7 (OK OK)
8 Pullouts OK (OK OK)
9 (OK OK)
10 pullout OK (OK OK)
11 - pullout OK (OK OK)
12 Veneer discard OK Not Buffed

41% 75%

Jootoie

47 Reg 1522 -
Press 42 - Load 3

1 Edge Discard OK
2 (OK OK)
3 (OK OK)
4 pullout Discard OK
5 [Com OK] Edge 1/8
6 (OK OK)
7 (OK OK)
8 (OK OK)
9 pullout OK (OK OK)
10 pullout OK (OK OK)
11 [Com OK] veneer 1/8
12 [Com OK] veneer 1/16

66% 83%

Irish Rose

1088 41 press

Round 1

OK OK

OK OK

3 fine spots | op Test 3

4 group spots | op Sounds 3 3

5 group fine spots | not op – Beat

6 OK OK

7 Stained OK on smooth part OK OK

8 OK OK Edge 1/16

9 OK OK

10 group pull outs ok – shade 3 3

11 OK OK

12 OK OK Edge Diamond

66%

Foolsie.

1088

Press 42

Round 2

1 Spots group Spots few test 3 Sounds 2 – 2

2 OK OK

3 2 fine spots ok test OK OK 3

4 OK OK

5 OK OK Sounds

6 Spots group fine | op test 3 3

7 group spots fine | not op test 3 3

8 OK OK Sounds at end RO

9 OK OK

10 OK OK 9 sounds at End RO

11 Very fine group spots OK test 3

12 Very fine spots | op test 3 Sounds

58

50%

Foolsie

NOTE 5–17–16

1088 – This Technique is good + takes care of something + is mechanically correct.

Make 24 1522 blanks with Labels on – deliver to music Room – Only 1 Coals in hole 3 on other parts, Room touching hole deep so dont touch

Schedule Put at Contact ~~when~~ needle off pin – When temp reaches 175 put on 850 lbs for 12 minutes. Cool Cold –

NOTICE

This is an improvement as all the discards are groups of very fine pull outs Scarcely noticeable. This also mechanically right as it is not likely there will be Gave spots + large pull out

We must now get conditions where Van will anchor to blank so it will pull away from Moulds. The Label should be sunken into

OVER

Hereafter - Spec areas

No 1

No 2

No 3

Label

into blank at least .002 or .0025 not .001 -
We then can get label by using 2 Coats of Var,
We must get Var on 1st Coat to go in deeper -

48 Reg 1522
Press 42 Load 3

1 OK OK
2 Pullout Discard OK
3 OK OK
4 OK OK
5 pullouts OK OK OK
6 Pullouts Discard OK
7 Pullouts Discard OK
8 OK OK
9 OK OK
10 Com OK veneer 16
11 pullout Discard OK
pullout OK OK OK

50% 66%

Irish Rose

49th Round,
Press 41 -

1 Com OK Edge 3/16 -
2 specs bug area Dis - " Position 3
3 Spots " 3
Spots " 3
4 Com OK veneer 3/16
5 Spot - OK Position 3 OK OK
6 OK OK
7 OK OK
8 OK OK
9 - specs bug area Posin 3 OK OK
" small "
10 Specs OK " position 2 OK OK
11 OK OK
12 Snapes OK } Discard Position 3

50% 76

Footsie

50th Round

Press 41 Load 2

1 Low Spot Speed — posin 1

2 Spec Area ok — Pstn 2 Discard

3 Ferro Spot — Posin 1 " 3

4 Veneer ok — Discard

5 OK ok

6 Specs " — Posin 3 " 3

7 Specs ok — ok ok 2

8 OK ok

9 Snapo ok — Psn 2

10 OK ok

11 Snapo Snapo — Psn 3 Pstn 3

12 Snapo ok — " 3

25 33

Jalsie

51st Round

1 OK ok

2 OK ok

3 Long stroke Speed — Posin 3 " 1

4 Effects — " 3 " 3

5 OK ok

6 Specs Specs — posin 2 2 — OK ok

7 Specs " — 2@3 2@3

8 Specs " — 1st 1st — OK ok

9 Specs " — 2 3 — OK ok

10 OK ok — 3rd 3rd — OK ok

11 Specs Specs

12 OK ok

41 75%

Irish Rose

Hereafter will record only No flaws by Eye

No Coincidence in OKs & descards with same moulds –

Have stopped numbering moulds –

37 Rounds gives by Eye — 63.24%
Inspection by Ear gives 75.8

12.56% More. 18000 nets 11,376 Rounds
Ear nets 13,644
2268 Extra Records

52
Press 42

Lowapat OK 2nd Posln

OK OK
OK OK
OK OK
OK OK
OK OK

41%

Irish R

53rd Round Reg 1522
42 Press

OK OK
OK OK
OK OK
OK OK
OK OK

41%

Irish Rose

54	55 – 1522 L.1357
Poems 41	42 poems
OK	OK
X	X
OK	X
OK	OK
OK	X
OK	X
OK	X
X	X
OK	X
X	X
X	X
X	X
X	OK
	OK
50%	33%
Tolstoi	Frank Ross

2nd Round.

So just as Bad

from this it would seem that 180° was better

I notice the varnish stick to mould is red + transparent showing no lamp black -

Apparently it Cooks up + has very little hardener. + this may be the trouble,

1089 E

24 Reg 1522. 2 Rounds -

Put at contact needle just off pin - When temp gets up to 300° Fahr put pressure at 850 lbs for 12 minutes.

PHENOMENON

Every Record stick horribly to the Mould,

1 =	1/2 area both sides	
2	3/4 —	3/4 area
3	"	"
4	"	"
5	1/4	1/4
6	1/2	1/2
7	3/4	3/4
8	1/3	1/5
9	7/10	6/10
10	3/4	3/4
11	allowed	allowed

+ yet there is only 100 degrees difference

1st Round

Press 4#	Position
1 side	3
OK	
OK	
1 side —	3
1 side	1
1 side	3
OK	
1 side	3
OK	
1 side	3
1 side	3
1 side	3
OK	

41%

Not Eat tested

Irish Rose

~~Foolish~~

2nd Round

Press 4#	Position
2 sides	3 3
OK	
OK	
1 side	1 & 3
Corn OK Edge 1/8	
OK	
OK	
OK	
2 sides	3 3
OK	
OK	
OK	

45%

Irish Rose

1090 E

2 Rounds 1522

Schedule —

Put in Contact needle just off pin —

When temp gets 180° hold it between 180 & 200° for 3 min then put 850 lbs on for 12 min full steam — Cool Cold

This is as good as any

1091

Press 42 — Position

1 side — 3

OK OK

2 sides — 3, 3

OK OK

OK OK

OK OK

OK OK

OK OK

1 side - — 3

OK OK

1 side — 3

2 sides — 3, 3

58%

Finish Roll

2nd Round

42

OK OK

OK Bare spot 5/8 — 3

OK bad spot — 3

OK small specs 4 or 5 — 3

poor print of form — ½

OK OK

OK specs few - — 3

OK specs few - — 3

OK Big bare dull spot — 3

OK OK

bare spot — 3

" — 3

OK bare spot — 2

25%

1091 E

2 Rounds Specially Inspected Varnished Blanks —

Reg Schedule

Note -

in 30 or 40 Rounds

Top 6 of 12 Records on rack gave 120 thousands

Bottom 6 99 thousands

Bottom 6 is at top of Press -

1092 1st Round Press 41 Press	2nd Round Press
OK OK spot on label 3	
ok specs small 3	
ok specs 3	
ok specs 3	
OK OK	
ok spot 3	
OK OK	
OK OK	
ok specs 3	
Cracked blank 3	
specs ok	

11

36% -

1092 E

One

~~1~~ Rounds 1522

The holes of the blanks being ~~reamed~~ notched ~~[illegible]~~ larger

~~of~~ bushing center of blank reamed below surface

Req Schedule

1093

Press 41 —

1 side specs	3
1 " "	2
Bare spot	3
1 specs	3
1 bare	3
1 ok 1 2 specs	2
1 side 3 specs	1
OK OK	
1 side bare spot	3
1 " specs	3
1 side bare spot	2@3
1 " specs	3
1 side specs	2
1 side specs	1
1 side a fern	3
OK OK	

16%

Footsie

2nd Round
41 Press

	Pocket
OK OK	
both sides	3
1 side	3
OK OK	
1 side	3
OK OK	
2 sides bare	3 3
OK OK	
OK OK	
1 side	3
OK OK	
2 sides	3 3

50%

Footsie

1093.F

2 Rounds 1522

Change the schedule thus

Bring to Contact needle just off pin, put on steam + wheel temp Reaches 175° Fahr put on 850 lbs + hold for 12 min Cool Cold,

I am told the Vannished Blanks are Very badly Vannished

Some Very little Van at Edge + in little ways dabbed Chick

1093

Press 41 —

1 side spots	3
1 " "	2
Bare spot	3
1 spots	3
1 bare	3
1 ok 2 spots	2
1 side 3 spots	1
OK OK	
1 side bare spots	3
1 " spots	3
1 side bare spot	2@3
1 " spots	3
1 side spots	2
1 side spots	1
1 side a form	3
OK OK	

16%

Footsie

2nd Round
41 pieces

	Points
OK OK	
both sides	3
1 side	3
OK OK	
1 side	3
OK OK	
2 sides bare	3 3
OK OK	
OK OK	
1 side	3
OK OK	
2 sides	3 3

50%

Footsie

1093.F

2 Rounds 1522

Change the schedule thus

Bring to Contact needle just off pin, put on steam & wheel temp Reaches 175° Fahr put on 850 lbs & hold for 12 min Cool cold.

I am told the Vannished Blanks are very badly Vannished

Some very little Var at Edge & in little ways darkend Chick

1522 Blanks

	Posts
1 side	1
OK	
1 side	3
2 sides	1
OK	
2 sides	1
1 side	2
OK	
OK	
OK	
OK	
one side	3

50%

Load 6

1519 blank Rejected.

1 side = small	3
both sides	3
both sides	3
"	3
OK	
OK	
OK	
OK	
OK	
OK	
OK	
1 side - small	3
OK	

58%

Load 6

1094 E Moores Expmt

1522

Put in Contact needle off pin - When at 200° up to 850 lbs for 18 minutes, then Coal

Load 6

1095 Sesame on label as usual

Press 42 -

OK OK

OK OK

OK OK Bare spot touching label

OK OK

1 side OK
fermin 1 portion Spec 3 p

OK OK

OK OK

OK OK

1 side pp at end mine 3
ok

OK OK 1 - 2 shrinkin 1/16 x 1"
ok Dont hear it 1

OK OK Spec front lines of remove
ok Cant hear it

1 Bare spot 2
ok

58%

75

3 Round

Press 42 1095 2nd Round

OK OK

Bare Spot 3
ok

Spec small -
ok 1

Bare spot 1/2 3
ok

Spec - Spec 1-1
ok

OK OK

Spec Spot 3
ok

OK OK

Small 1/8 bare 3
ok

OK OK

Big bare Spot no print
ok dull on second
which has no
remove
label at after end

Bare Spot 3
ok

33%

3rd Round

1095 E

Ream out 2 Rounds of Vacuumated blanks so bushing in Mould will go down into it that touch the blank, to prevent Cooking

Reg Schedule

Notes

All Records fill perfectly

80% of discards are due to sticking to mandrel in large areas at End of music
There is only 2 Reasons for sticking —

1st The bushing + label + mat flattening blank flush at hole Keeps mandrel from touching record Some as much as .0115 - others less, This permits Cooking — E

2nd Cooking brings up shellac or wrong shellac, The 6/4 is diminished somehow —

5—17—16

Ordered Hoffman to stop using Hammers for loading 1522 blanks

5-17-16

1. Notes
Make round thin Var soaking it well in + bake, Dilute the Var by Alcohol 1/5 more by bulk soak well.

2 = Make some Var 12% 6/4

3 Try 4 rounds with fresh moulds

4 grafile bag knocking over mould

5 = Ventilated moulds

6 Jeff Kircher about bad Varnishing

7 Neutralize KOH on moulds by 1/10 th % HCl

8 - Varnish 24 starting at hole + going outwards

9 Hoffman try fine ground powder in your reagular Lubricator blank

10 Morris to use 2 or 3 pour slow cured moulds press at 850 Cold.
ditto 850 lbs Cold then steam for 12 min

1096 E

Hoffman

Special Var Thinner

Viscos of Req 1019 is

1 min 30 sec

This Var thinned by alcohol

& Viscosity made

1 min

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 14
Notebook, N-16-05-17

This notebook was used by Edison during May 1916 for notes on experiments to improve the surface quality of Edison disc records. The entries pertain primarily to experiments 1097E through 1137E; there are also lists of other experiments and tasks to be performed. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted. Also included are notes are on inspections of discards, along with comments on edging experiments. One notation indicates that the results of experiment 1134 were reexamined in November 1916. Some notes are in the form of instructions to Sherwood T. (Sam) Moore or Archie D. Hoffman. Inserted into the book are two loose items, including a note by Edison in regard to Experiment 1134. The front and back covers are labeled "14." The pages are unnumbered. Approximately 140 pages have been used.

12	100
11	91
10	83
9	75
8	66
7	58
6	50
5	41
4	33
3	25
2	16
1	8

67150

Acme Co.,

MFG. STATIONERS,
96 JOHN ST.
AND
19 PLATT ST.
NEW YORK.

Started
5—17—16

Req Dups
Load 2

Press 41

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

spot	2
specs	3
spec	1
specs	3

OK OK
OK OK

spot	2
specs	3
specs	2
"	2

66%

Req Dup
press 42 - Load 3 -

ok spot on label print bare	3
ok Dull spot next label	3

OK OK

ok specs few	3

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

ok specs small	3
ok big brown spot	3

58%

5-17-16

Rag Dup 1522 1019 Var
Press 42 Load 3

OK OK
OK OK
OK OK
OK OK
OK OK
Spot — OK 3
OK Specs 3 places 2
OK OK
Bare spot hot op 3
Bare " 3
OK spot — 3
OK spot — 2
OK 2 bare spots 2-3

50%

Rag
Press 41

OK OK
OK OK
OK OK
OK OK
Specs op 2@3
OK specs 3
OK OK
OK OK
OK specs — 3
OK specs — 2
Specs hot op — 2@3
OK specs 3

50%

NOTE

5-17-16 - NOTE

NOTE

Here is a change in position 3 + Pull out question.

Reducing Lamp stock, makes less specs + these are not pulled, but round, yellow in color showing air below, when diamond runs over breaks them — 75% OK - The Varnish runs out over moulds. Miller noticed before when this occurred % was good,

This is the new line to work on - Label blanks + 1 coat 5 cc on machine, and manipulation of Var + baking

SEE 1080-C Var Book 13 -

1097 E

Luhr has made Two Moulds for Hoffman having brass discs representing Label, 002 thick soldered on with Bismuth solder Hoffman to use them all the time and send to me

These tend to come off

5-17-16 not necessary now —

Opened Moulds so as not to pull off direct but little → twist given before removing

The twist dont seem to answer

New Lot Moulds. Hula, + Rosary

Specs " Large area	3 3
OK OK	
Small firm OK	2
OK OK	
Small specs OK	1
Terra specs op	2
Specs Specs	3 3
Bare spot " Bare op	3 3
Specs Specs op	2 2
OK OK	
Specs Specs Specs op big	2 3
Spec small OK	2

25%

Hula

Spec – OK	2
OK OK	
Specs Specs op	3 3
Specs OK	3
Specs Specs	3 3
OK OK	
OK OK	
Specs Specs op	3 3
Specs small OK	2
Specs OK	2 + 3
Specs "	3
Specs "	2

Rosary

1098 - 1st Round

Press 41 load 9

Com OK - Veneer 1/16

OK OK

OK OK

OK OK - 3/4 fill.

Specs (one - Very Specs / short-small) OK OK 3

OK OK

OK OK out at Edge label

OK OK

OK OK fine specs are on bridge wall 3

OK OK " " 3

OK OK

OK OK

100%

2nd Round Press 42 Load 10

Com OK Edge V 1/16

OK OK

OK OK 2 low spots in label

OK OK fine bridge wall specs 3

OK OK fine " " 3

OK OK

OK OK

OK OK

OK OK

OK OK

DISCARD Edge

OK OK

100% print

1098 E

24 1522 blank

Only 1 Coat of Varnish - 5cc

Use the 1 min Viscosity Var 1019

put on Coat - immediately another Coat. Then bake 2 hours at 130°

1099.E

Press 42 Received 10

OK ok

OK ok

OK ok

OK ok Very fine Spec. 3

OK ok

OK ok

OK ok

OK ok

Com OK veneer 1/16

OK ok

Com OK Edge V 1/8

OK ok veneer broken at edge & swamp

100%

2nd Round

Press 42

OK ok

OK ok

OK ok 1½ × 1½ Bridge wall no sound

OK ok

OK ok

OK ok

OK ok Bridge wall low

OK ok Bridge wall area no sound
" "

OK ok

OK ok Bridge wall + Vanish break – don't sound

OK ok looks bad #2 its OK

OK ok

100%

1099.E

24 1522 Blanks One coat only – Bake 2 hours, 1019 var
Bott Van Moochen 5.cc –

Print Regular –

1100 E

NG -

All puffed up, stuck to moulds - took 2 out but put others back in press to run Req to get them off

Shows there is lot of air under pressure under Records

After reprinting they came off moulds freely

1100 E

2 Rounds req 1522 blanks

After 850 lbs have been on for 12 minutes reduce pressure to contact needle just off the pin - hold it there

Cool Cold -

1101 — Round 1
Press 41 Load 9

OK OK
OK OK
OK OK poor print next to labels but OK
specs 3
specs 3
specc — 1
OK
specs — 3
OK
OK OK
OK specs — 3
OK OK
OK OK
Comm. Edge ½ OK
OK specs 1@2

58%

2nd Round
Press 41

specs next label OK 3
OK
OK Big spot — 2
Big spot 3
specs 3
specs 3
" 3
OK OK
specs 2
" 2
" 2
" 2
OK OK
OK specs — 3
OK specs 2
OK spec first time 1
OK OK

25%

1101

2 Rounds

Change schedule
to 1000 lbs instead
of 850 in Reg schedule

1000 No improvement
worse apparently —
too much varnish
makes gas —

1102

OK OK Bridge wall corners

OK OK

OK OK

OK OK Bridge wall corners

OK OK

Spaces of veneer pulled out 1 OK

Considerable space OK OK OK

Bridge wall [illegible] Crushed Edge Discard

OK OK

Com OK veneer + Edge VV

OK OK

OK OK Bridge wall corner spaces

89%

1102E

One round label blanks
Varnished 1 Coat
in the Machine 5cc
bake 2 hours

Ream holes

Print Reg Schedule

Do not need the sunken
Label - Dont do any
good — 5-18-16 -

Printed two of them =

The first one Cracked the blank found pin was too Tight. forcing down by men probably cracks blank
Made another one this was reamed .008 larger (18) the hole,
This printed fully.
Surface very good considering that there is no Var = better than our regulars when we started -
No Run outs, could make a Cornel record of 1000 lbs pressure used -

This experiment shows we only need one coat of Varnish baked 3 or 4 hours to make it a Success -

Surface is nearly as good as Varnish Except Low Center - where Var helps.

1103 E

In one of the Reg rounds use a discard mould put in a 1522 blank no Varnish on -
See hole is reamed -
Print the round regular + note on slip if its in the round

1104

Press 41 load 9

Com OK Veneer 1/8

Com OK Veneer 1/8

OK OK -Spot on Label

Com OK Veneer 1/8

OK OK

OK OK

Veneer discard print OK OK

OK OK

Discard. Edge print ok

OK OK

OK OK

Edge discard ok print
Spaces creamy

91½% print

75% to Stk

1104 2nd Round load 10

Press 42

OK OK

Discard Edge ok print

Discard Veneer OK Print

OK OK

Discard Veneer OK Print

OK OK

OK OK spaces dont sound 3

OK OK spaces dont sound 3

OK OK Edge V 1/16

OK OK veneer V 1/16

OK OK fine spaces bridge walk dont sound

Bridge walk + quick 3 - OK OK
OK

100% pass

1104 E

Make 2 Rounds Duplicating C Varnish of 1080 E

but put on only one coat in machine 5 cc -
Bake 2 hours - 130°

Print Rag

1080

Duplicate 2 Round with this Varnish on Label blanks -

Note that 100g 1 min Vis is better than this showing thinner Var goes into blank deeper + anchors veneer better

1105

Hoffman Cancelled

Make some Varnish use no Lampblack, 1½ Viscosity 8% 6/4 Reg Sandrac But leave out Para altogether,

1106E

Use the Varnish of 1105

One Coat 5cc done on

machine, Bake 3 hours

at 140° fahr

Print Req Schedule

Req.
Press 41 Load 9

OK
OK

OK
OK

Spec op 3
"

OK
OK

OK
OK

Specs from oil 3
" 3

OK
OK

Specs op 3
" 3

OK
OK

OK
Specs 3

OK
OK

OK
OK

66%

Req
Press 41 Load 9

OK
Specs 3

Bare spot 5/8 2
OK

bare spot 2
specs

OK
OK

OK
specs 2

Specs
Specs op 3

Bare spot
spec op 2

OK
Specs near latch 3

big spec pull out 3
Specs 3

Specs 3
" 3

OK
Spec 2 @1

OK
OK

16%

* means no record of position etc

Reg
Press 42

*
*
OK
OK
*
*
*
OK
OK
*
*
*
*
*

16%

Too much Var or not thorough baking makes gas — No pull outs —

3 Coats is a mistake,

Single Coat long baked is what's wanted

3.5 or 5. cc 2 @ 3% Lampblack

or none,

1107 This is D Var of 1080 Book 13

2nd Round 41 press

no record of bad pos

Press 41 – Load 9

OK Yellow spots not pull out, 2	OK OK
Diagonal 1/2 x 2 1/2 red spots both sides — no pull out	OK OK
OK OK	OK OK
	Com OK Edge
Air	OK OK
Air	
Air bubs	
OK	X
OK air bubs	X
Awful bubbles not open no PO	X
few bubs	X
Fern big not pulled out	X
OK few bubbles	X
OK bubbles swelled out	X
bubs bubs small. 1/2	

8%

41%

1108 — 1st

Press 41 — Load 9

OK OK

OK OK

specs veneer — OK OK

Discard — Veneer specs — OK

OK OK

specs too much OK

OK OK

specs specs big area

specs specs OK OK 3

Com OK — veneer 1/8

OK OK

specs fine OK

50%

58 —

2nd Load 9

Press 41

Discard Veneer

OK OK

specs specs probably ink on Machine

specs OK "

specs OK "

Com OK — Veneer 1/16

Bad specs OK

Discard Veneer OK

Com OK — Veneer

OK OK

OK OK

print OK Discard, V Edge to mach. OK

1108E

2 Rounds 1522 - reamed hole slightly larger after baking

Use Varnish "D" one coat

355° bake 4 hours

Print Req

1108 } are Duplicates by
1109 } Mistake —

No Lamp block in D

1109 - 11

Press 41 Load 9

OK NOK Specs " Edge Discard

Com OK Veneer

Discard - Veneer

Discard - Veneer

OK OK Specs OK

OK OK Print Edge Discard

Com OK - Veneer

Specs Specs OK OK

Com OK - Veneer

OK OK

OK OK

11

63% 73

Edges clean

2nd Round Load 10

Press 42

Print OK Discard Veneer

Print OK " Edge + Veneer

Com OK - Veneer

OK OK

Specs big crack OK OK OK

OK OK

Specs - bridgewell OK OK OK

Print Specs OK Discard - Veneer + Edge

Print OK " Veneer

Specs + Veneer OK OK OK

Discard Blank Broken 1/2 of Edge cuts inside

" " "

25% 50%

1109 E

2 Rounds 1522 bush reamed + hole enlarged after Varnishing

Use Varnish "D" of 1080 E

Use 3.5 cc One coat

Bake 4 hours

Print Reg 4 hours Bake

Bad - Edges bad Crack -

NOTE

This Varnish together with long bake does not weld the Varnish like Lampblack — + there also seems too much broken Edges, 1108 is Duplicate

D Var 1½ Vis no good Cant say about 4 hours bake

1110-

41 Load 9	42 Load 10	42 Load 10	41- Load 9
Stick to Mould 4	Stick Mould 4	Stick 4	Cut Margin 1
OK OK	Com OK Veneer 1/16	OK OK Spot Low pt	OK OK
OK OK	Com OK Edge	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK Low spot 3
OK OK	OK OK	Com OK Edge	OK OK
OK OK	OK OK	OK OK Low spot 3	OK OK
OK OK	OK OK low spot 3	OK OK low spot 3	Discard - Edge bad ok
Discard - Edge ok	OK OK	OK OK	OK OK
Discard Edge	OK OK	OK OK	OK OK Low spot
OK OK low spot 3	OK OK	Com OK Edge ✓	OK OK Low spot
OK OK	Edge - Dised ok	OK OK	OK OK
Com OK Veneer	OK OK	Com OK Edge 1/16	OK OK
DISCARD Edge ok	OK OK	OK OK	OK OK
OK OK	OK OK Low spot 2	OK OK	
75%	91%	100%	91% 100% Print

1110E

1522 B - Means no hammer used -

48- 1522 No hammer blanks 1522B

1 Coat 5cc 1 min Viscosity

Bake 2 hours - 200°C

Print Reg

1522 B

5-18-1916-

Technique now-

Blanks 1522B. no hammers

Varnished one coat 5 cc

of 1 min Viscosity 1019 Var

Baked 2 hours

Reamed at hole for bushing below,

Printed regular schedule

Contact needle off pin when 200° reached put on 850 lbs 12 mins Cool cold.

~~Holes reamed .008 larger to stop cracking of blanks~~

~~1~~ 1111 E

Press 42 Load 10

OK
OK
OK
OK
OK
Discard Veneer
OK
Com OK veneer 1/8
OK
OK
OK
OK
Com OK Edge V 1/16
OK
OK
OK
OK
Com OK veneer 1/16
OK
OK

91% 100% points.

No Van record is pretty Rough

1111 E

Hoffman Make 4 Rounds 1522 in moulds that have the rough faced plastics used with old transfer Blank-

Varnish 1 coat 5cc on Machine with 1 minute Viscosity Varnish Bake 2 hours

Print ~~with the~~ Req be sure one round has the Discard mould ~~to~~ use blank not varnished

Notes -

Notice Scraping off Wheel all chewed up on Edges + rounded - This should be inspected + trued up often

Fixing bushing in mould well
Cut the rise in center flues perhaps new bush necessary =

Moore oil may come from bearing of scraping off wheel creeping -

1112
Press 41 Load 9 –

OK OK — see opposite side for lack of fill.
OK OK
OK OK
OK OK
Discard Edge OK
OK OK
OK OK
Discard-Edge OK
Com OK — veneer
OK OK
OK OK
OK OK — can hear this ① but OK

83% 100% proof

1112 E

Hoffman

Find 12 blanks with most spaces of metal & largest pick them out, send over to Wallace Varnish & Run them Req

It is all right to pick out of face the steel chips if not scraped too deep – Careful work will save them all –
The only effect is that at spot it not a full print

5-18-16

1522 B 1 Coat 2 hour bake
1 min Viscosity - 1019
Var up slaw

This shows No hammer blanks, 1522 B are ok

also 1 min 1019 Var ok.

The bridge wall areas are due to the 6" Center diameter of all blanks is lower than The Edge Circle as shown by the Printing of the Non varnished blank
+ that bridge wall areas are Really only a 3/4 fill.

We should bring Center of Blanks up a little more

Bridge wall only makes surface a little rougher as it not consolidated like a full Print -

5-18-16 1522 B
New Series -
Reg # 1 Round

OK OK
OK OK #3 Bridge W large Contamination only roughens surf
OK OK
OK OK Bridge wall area 3
OK OK Bridge wall area 3
OK OK
OK OK Bridge wall area 3
OK OK
OK OK Bridge wall area 3
OK OK Bridge wall area 3
OK OK

11

100%
1st Record of 5-18-16 Technique -

Press 41 1522 B
2nd Round

OK OK
OK OK Low print spot 3
OK OK
OK OK
OK OK faint low print spot 3
OK OK Low print spot + Kolt stain on label. 3
OK OK
OK OK Low print sounds but looks OK Decard 3
OK OK
OK OK
OK OK
OK OK Low print all around at # 3

91%

Reg's. give clean edges -

Moulds are also clean -

3rd Reg 1527 B -	4th Load 10	5th Load 10	6th Round Load 9
42 Press	42	42	41
OK	OK	Discard, Edge	OK
OK	OK	OK	OK 2 low spots 3
OK Low Pnt spot 2	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	Com OK Veneer 1/16	OK	OK
OK low pt spot 3	Com OK Edge ✓	OK 2 low spots 3 big	OK big low 3
OK	OK low spot 3	OK	OK
OK low pt spot 3	OK low spot small 1	OK	OK low spot 3
OK	OK	OK	OK low spot 3
Com OK Edge ✓	OK	Com OK Veneer 1/8	OK
OK low spot 3	OK	OK	OK 2 big low 3
OK low spot 3	OK	OK	OK
OK			
100%	100%	91%	100%
Edge 1	Edge 1	Edge 1	Edge none

7th Load 9	8th – Load 10	Reg factory hand 9th	Reg factory 10th
41	42	41 Load 9	41 Load 9
OK OK	Veneer pulled out OK Edge Music	OK OK	OK OK
OK OK low spot 3	OK OK Low spot 3	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK low spot 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK low spot 1	Com OK Edges
OK OK	OK OK	OK OK	Venecci OK DISCARD
OK OK	OK OK lowspot 3	OK OK	OK OK
OK OK low spot 3	OK OK low spot 3	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK lowspot 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK lowspot 2	Edge OK DISCARD
OK OK	OK OK	OK OK	OK OK
100%	91%	100%	83% 100% prime
Edge none	Edge none	Edge none	Edges 3

11th	12th factory	13th factory	14th
42 Load 10	41 – Load 9	42 – 10 Load	
Mould Pullouts 2	No Pout. Mould	4 Pullouts – 1 Load Edge	
OK OK	OK OK	Veneer DISCARD OK	
OK OK	OK OK Low allowance 3	Edge DISCARD OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	Com OK Veneer 1/16	
OK OK	OK OK	OK OK Low spot 2	
OK OK	OK OK	OK OK Low Spt 3	
OK OK Low spot 3	OK OK	OK OK	
OK OK	OK OK	OK OK Spot low 3	
OK OK	OK OK	OK OK Low Spt 3	
OK OK	Com OK Edge	OK OK	
Com OK Veneer	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK Low Spots 3 of Com		
100%	100%	83% 100% Pt	
No Edges	1 Edge		

5-19-16

Inspection of 1522/B blanks

Blanks within 012 Calliper OK

" " 020 " Seconds

Blanks beyond 020 to be held for further orders

Special defects causing discard to be held for further notice

Steel in face of blanks if small is to be passed if large held for special operation —

Give me a dozen with many specs & I will mark those which may pass.

250/1000 Maxim for thickness

Crush Edge Exp'mt Moore Expt.

Printed without pins —
Inspected for Crushed Edges only

OK OK out of line from discards

OK OK "

OK OK " Bad

— 1/32 Edge not pulled out — Veneer drawn a little showing slight Crush

OK OK out of line Bad

OK OK slight almost in line

OK OK out line Bad.

Nothing in this Theory

Theory was pins at angle of faces of faces shifted

Demonstrates Theory

1113 E

12 blanks 1522 B with rubber 6" dia. $\frac{1}{32}$ thick added to Reg Pressure Rubber to make middle of blank thicker, it need being low —

Print 1 on each Round - 6 Rounds load 9 + 10, No Varnish on blank —

This was done + They were very much more even, it also appeared to stop crushed edges

14th Factory	15th Factory	16th Factory	17th Factory
1522 B	—	—	—
42 – 10 Load	42 – 10 Load	42 Load 10	41 – Load 2
Mould no PO	Mould no PO	no puff outs (mould)	no mould PO
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK L Spots 3	OK OK	OK OK
OK OK	OK OK L spots 3	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
	OK OK	OK OK	OK OK
OK OK	OK OK L Spot 3	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK L Spot 3	OK OK L Spot 3	OK OK
OK OK low spt 2	OK OK	OK OK L Spot 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK L Spot 3
OK OK low spt 3		OK OK	
OK OK			
100%	100%	100%	100%
no Edge	no Good Edges	no Good Edges	no Good Edges

Average to clock 88.6 to this point.

18	19	20	21
factory production.			
42 - load 10	41 - load 9	42 load 10 -	42 - 10 load
1 label PO	None attack	none attack.	none attack
OK OK	OK OK L Spot 3	OK OK	OK OK L Spot 3
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK L Spot 3	OK OK L Spot 3	OK OK	OK OK
OK OK L Spot 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK L Spot 2	OK OK	OK OK	OK OK L Spot 3
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK L Spot 2	OK OK	OK OK L Spot 3	OK OK
OK OK	OK OK	Com Veneer ½ OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK		
100%	100%	100%	100%

All reg have clean Edges
Varnish dont come over
also Moulded Edges
clean —

No Var blank in 24th Round — 1113E Lot
Evenly printed, even shine all
over — one face shows spot,
some much came out of blank
+ made 15 knocks —

25th Round Non Var blank
Even shine —

22 factory	23	24	25
42 load 10	41 — load 9	42 — 10 load	41 — 9
No PO	No Pull outs	5 pull outs Marred Scratch	1 pull out (marred)
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK L Spot	OK OK	OK OK L Spot 3
OK OK	OK OK	OK OK	OK OK
OK OK L Spot 3	OK OK	Com OK Edge $\frac{1}{16}$	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK L Spot 3	OK OK	OK OK L Spot 3	Com OK Veneer $\frac{1}{16}$
OK OK	OK OK	OK OK L Spot	Com OK Veneer $\frac{1}{16}$
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK L Spot 3	OK OK L Spot 3	Com OK Veneer Edge V	OK OK
OK OK	OK OK	Com OK Edge V	OK OK
OK OK	OK OK	No V Blank	Non V blank
OK OK	OK OK		
100%	100%	100%	100%

Many feathers hole too small
have them thrown out +
fixed

26	27	28	29
Factory Production 41 — 9 hour	41 — 9 hour	41 — 9 hour	42 — 10 hour *
None struck	None struck	4 Points -	2 pull outs
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
Com OK Edge 1/16	OK OK	OK OK	OK OK big low position 1
OK OK	OK OK	OK OK	OK OK big low 2nd
OK OK	OK OK	OK OK	OK OK big low 2nd
OK OK	OK OK	Com OK Edge 1/32	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK L spot 3	OK OK	Veneer OK DISCARD
OK OK	OK OK	Com OK veneer 1/16	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK big low position 1	OK OK L spot 3
100%	100%	100%	91%

Moores Expts to find out cause of raised spots + rising Edges on blanks when heated 200° Fahr in press

1 = Finger marks dont produce them
2 = Salt (dry) dont produce
3 Machine Oil "
4 Sesame oil - "
5 Alcohol "
6 Water this produces them
7 Spittle marks - This produces it
8 Solid Crys 6/4 This produces them good
9 Para (solid) this produces them -
10 KOH (solid) Dont produce
11 KCy " "
12 phenol " "

Water + 6/4

33 Rounds 93.55 OK

30	31	32	33
1523-Lot 4	Lot 2 15223	Lot 6	Lot 7
41-Load 9 no pull outs	42-Load 10 Nameplate	41-9 load No Sticks Moved	42-10 load 2 pull outs -
OK OK	OK OK bad low 3	Com OK veneer 1/16	OK OK
OK OK L Spot 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK spot 3
OK OK	OK OK low spot 3	OK OK	OK OK
OK OK low spot 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK Focus 3
OK OK	OK OK	OK OK	OK OK low spot 3
OK OK	OK OK	OK OK	Com OK Edge V
OK OK	OK OK	OK OK	Com OK veneer 1/8
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK Spot 3	OK OK focus spot 3	Com OK veneer Com OK Edge V	OK OK
OK OK Spot 3			
100%	100%	100%	100%

34	35	36	37
1522B Lot 8	Lot 8	Lot 8	Lot 8
41-load 9	42-10 load	41-9 load	42-load 10
none shock	1 Puff out	1 in Lates	none
No Var OK even	no Var Even	no Var Even	no Var Even
OK OK	OK OK	Veneer OK DISCARD	Edge OK DISCARD
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK Spot 2	OK OK —spot— 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	Corn OK Veneer	OK OK	Edge OK DISCARD
OK OK spot - 3	OK OK Spot 3	Corn OK Edge ✓	OK OK
OK OK spot 3	OK OK	OK OK	OK OK
Veneer DISCARD OK	OK OK	OK OK spot 3	OK OK cellaround 3
OK OK	OK OK Spot 2	OK OK spot 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
		OK OK	
91%	100%	91%	83%
1 Edge			

1114 Press 42 - Load 10

OK OK

OK OK

OK OK all around faint low due probably to label or Van low

OK OK

OK OK } low long spot opp - No 2 position

OK OK

OK OK

OK OK low all around probably due to label or varnish low -

OK OK

OK OK

OK OK Think bad Moulds may have something to do with last 3 Rounds

100% No Veneer or Bad Edges

for other 3 Rounds see 3 sheets Ahead

1114 E

Hoffman - Make 48 blanks like 1113, with the Extra 6" X $\frac{1}{32}$ Rubber on bag Rubber

~~Print~~ 4 Rounds 1 coat
1 min Viscosity
2 hour bake

Print Req 1522 B schedule

This dont stop low spots at 3rd position
other 3 Rounds 3 sheets ahead shows bad Veneer + Edge Discards + Low spots

Pressing blanks 15228 between record
Mouldes 850 lbs NO Heat.
only makes Tit impression circle on
Label faint + only traces of
record vibrations —

It does no Harm —

No1 -

38	39	40	41
Lot 5		Lot 8	Lot 8
41-9 load	41-9	41-9 load	42-load 10
2 on Margin PO	1 1 PO on Margin	no PO	2 on label 2 on Margin
No Var Even	No Var Even	No Var Even	No Var a little uneven
Com Edge ok	OK OK	OK OK	OK OK
Com Edge ✓ ok	Com Venn + Edge OK	OK OK	OK OK Spot 3
OK OK	OK OK	OK OK	OK OK all around 3
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK one pull out Spot 010 but OK
Veneer OK DISCARD	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Edge OK DISCARD
Com ok veneer ✓	OK OK	OK OK	OK OK
Veneer OK DISCARD	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Com ok veneer
OK OK			
83%	100%	Perfect Record 100%	91%

Nothing Comes out on Edge — Clean

43 Rounds

42	43	44	45
Lot 8	Lot 8	Lot 5	6 Lot
42-loaded 10	42 - 10 loaded	42 - 10 loaded	41 - 9 loaded
2 PO on Label	none 1 bad Edge	none	2 pull out 5 when
No Var fairly Even	No Var Shade Uneven	OK OK	OK OK
OK OK Spot 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK Spot 2	Com OK Edge V
OK OK	OK OK	OK OK	Com OK Uneven
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK Spot 1	OK OK Spot 3	OK OK
OK OK	OK OK	OK OK	Com OK Edge V
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
Uneven OK DISCARD			Com OK Bad Edge
OK OK			
91%	100%	100%	100%

47 Rounds

Discard for Edges 10
" for Veneers 8
18

Edges that can be edged OK 18
Veneers " " 15

Veneer Discards can probably be used for dispensers

RESUME

Total discards for Veneers + Edges 1/3rd of 1%

~~Average to here~~
96.3% OK

46 Lot 7 42-10 L	47 Lots 41-Load 9	48	49
4 Bad Edge 1 Pull out	3 Pullouts		
OK OK	Edge OK DISCARD		
OK OK	OK OK		
OK OK	OK OK		
OK OK Spot 3	OK OK		
OK OK	OK OK		
OK OK	OK OK		
OK OK	OK OK		
Com OK Veneer 16	OK OK		
Com OK Veneer	Com OK Edges		
Edge OK DISCARD	OK OK		
Edge OK DISCARD	OK OK		
Edge OK DISCARD	OK OK		
75%	91%		

1114 E

2nd Round 41 – Load 15	3rd Round 42 – 8 Load	4th Round 41 – 12 load
Edge + Veneer OK DIS	OK OK	OK OK Low 3
Com OK Veneer	OK OK	Com OK Veneer + Edge
OK OK	Com OK Edge ✓	Com OK Veneer + Edge Low 3
OK OK	Com OK Veneer -	OK OK
OK OK	Com OK Veneer Low spot	Com OK Veneer
OK OK	OK OK	Com OK Veneer
OK OK Low, due to Stretch 3	OK OK	OK OK
Veneer OK DISCARD	OK OK	Veneer OK Discard
Com OK Veneer	Com OK Veneer Spot 3	OK OK Low all around 3
OK OK	Veneer OK DISCARD	OK Com Low all round 3 Veneer
OK OK Low spot 3	OK OK	Veneer OK DISCARD
Edge Edge/Gouch DISCD	OK OK — Low spot 3	OK OK
75%	91%	83%

1115 E

12 1522B printed without Varnishing 1 in each Reg Round – Made with Extra 6" X 1/32 rubber in middle of big Rubber Blanks 10 perfectly Even 2 slightly uneven

42 - Load 9

1 OK Salvin -
2 Jumps over
3 OK Bad Label
4 Bad fill
5 Bad fill
6 Bad fill -
7 "
8 "
9 "
10 "
11 "
12

3 position

By manipulating
Technique on Varnish
getting Middle blanket
higher at 3 position
at 1000 lbs in Print
preserves final
think we can
make Repeats
75% OK

Surface general

1115E

Reprint -
Varnish 1 Coat 1 min
Viscosity 1019 Vari -
1 round of Reg 15223
Records - Dry 2 hours
Print rzg

1116E Edwing

1= 1/4" dont cleanit = 3/16 well
2 This has only 1/8" margin left
3 [illegible] - blank cleaned but Veneer PO
4 Blank cleaned ok but Veneer pulled - 3/16 left
5 OK - 1/4
6 OK 1/4
7 clean up with 5/32 Margin
8 1/16 margin left.
9 3/16 margin left ~~Blank~~
10 OK
11 5/32 margin left
12 OK

1/4 + 1/32 3/16

33% 58%

1116E

12 Prints which were ~~sup~~ supposed to be discards for bad Edge but which were not actually chipped out Except a part, but from the appearance of the Veneer might External further than apparent & be a discard
The standard is 1/4" but I find it 1/32 more than this on some of Edged records returned -

Note

Requires 370 lbs Chalk

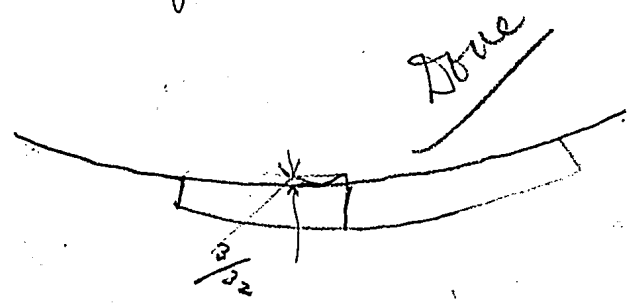
per 1000 1522B Blanks

Inspection for discard blanks
Edges.

1 Nicks within 3/32 of Edge are
2 OK.

More than 3/16 Discard

have gauge made



24 Blanks
13 Discards
11 OK within the 3/16 limit

Calliper of Old Transfer Records from Baldwin
10 of them — 1297 Blank

		Dif-
227	217	10
226	225	1
227	232	5
232	230	2
238	228	10
225	225	0
226	218	8
218	218	0
240	222	18
230	233	3
2289	2248	

Highest 240

average 226

Calliper of 12 New 1522B Records

216	213	3
211	205	6
216	216	0
224	216	8
205	211	6
207	217	10
223	223	0
212	212	0
208	213	5
220	217	3
235	222	13
217	213	4
2594	2578	

Original blanks not above 250. were used,

Some days mean days gets lot over 250 other days under 250.

average 215 1/2

1522 B
Calliper for Worst.

They use a Micrometer gauge when over 235 — 1522B are nearly all over 235 - hence solid gauge not used —

Man says chipped Edges due to striking Edge of one blank on the other by sliding on the pile —

I think some are chipped by the Snap gauge & I believe by the Micrometer - also rolling on Edge to Calliper

Difference		Thick
15	26	262
13	16	253
16	11 — note	255
18	20	251
20	16	253
17	note	253
20	12	255
25	17	
15	18	
13	25	
17	25	
7	15	
30		

above 250 ballance below 250

note - Useless inspection

New 1522B Blank Inspection

no Calliper for thickness

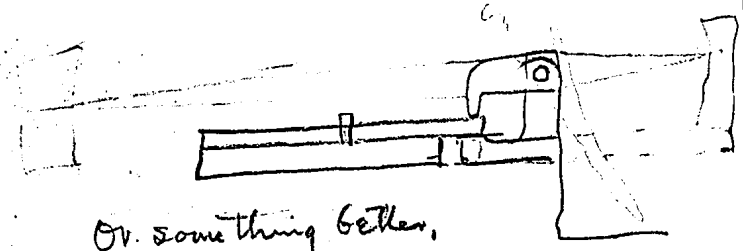
Anything ~~under~~ 260/1000 OK

Chipped Edges Extending in not more than 3/32 OK

Callipering for diference of thickness not necessary Abandon it,

Inspect for steel and holes, dirt, Etc

Get a special gauge for Quick calliper for thickness



Or something Better,

1117E

8 Rounds of discard blanks. discarded for too great diference in Calliper up to 30/1000.

1 Coat 1 min Vis 2 hour bake - 1019 -

Print Req 1522B schedule

See next page for results →

1st Round	2nd	3rd	4th 42 pieces - 12 load
41 - 9 load	42 - load 8		
Probably Down Edge	Veneer Edge OK DISCARD	OK	Com OK veneer
OK	OK	OK	OK
Veneer DISCARD OK	Com OK Edge V V	OK	OK
OK	Veneer " DISCARD	Com OK veneer	Com Com Veneer
OK	Com OK Edge V V	Com OK veneer	OK
OK	OK	Veneer DISCARD OK	OK
Veneer DISCARD OK	OK	OK	Com OK Edges V V Veneer
OK	OK Com OK veneer	Com OK veneer	OK
OK	Com OK veneer	Com OK Edge V Veneer	OK
OK	Com OK Edge V Veneer	OK	OK
OK	OK	Veneer DISCARD OK	OK
OK	Com OK Edge V	Veneer DISCARD OK	Com OK Edge V
OK			OK
75%	88%	75%	100%

5th	6th	7th	8th —
Lot 8 - 42 pieces	41 - load 11	42 - load 6	Pieces 42 load 13
OK	OK	OK	OK
OK	OK	OK	Com OK veneer 1/8
OK	OK	Com OK veneer 1/16	OK
OK loose spot 3	Com OK veneer 1/16	OK	OK
Com OK Edge V	OK	OK	OK
OK loose spot 3	OK	OK	OK
OK	OK	OK loose spot 3	OK
Veneer DISCARD OK	OK loose spot 1	OK	OK
Veneer DISCARD OK	OK	Veneer 1/8 OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK loose spot 3	OK	OK	OK
	OK loose spot 3		
83%	100%	100%	100%

Moore says Comm cases 1/2 of
2 = Uteen & Thum make room

4 = Sent for one - 5=22-16 4 OK works

Note

5 = ordered

7 = Notified Hud & Hoffman

Notes

1 = Storage place for Transfer plates & mandrel holders - greased up -

2 = Remove and store tables on which allowed plates are placed, greased up - only small room at first

3 = Rig up to ~~change transfer process~~ into Print ~~process~~ -

4 = Experiment on Edging Mandrif lots ~~without accepting~~ records -

5 = Try 4 Records with Extra Variat ~~of action~~ 3 on 152213
Extra rubber on Rubber plunger

6 Expt Water proofing Edges

7 Stop Chipping out of Blank Edges in Hoffman Dept.
& all along the line -

8 = Dont work good - Dunwiddie Expanding

11 = Is Expanding

14 = Dont stop low spots, Wear or Edges

8 = See how new larger magnet works if it dont do it put another in ~~[illegible]~~ & divide the drop -

9 = Inspector picking steel out & scraping -

10 = Keep Floors on the drapes of liquid that sweeps up

11 = Dunwiddie Expt on roller equalizer pulling on Vacuum.

12 = Emergency Storage sealed Cans mouths & apply grafite - in Vault

13 = Specially sifted Very much finer powder 1522 B for print Kit Marlen & water proof

14 Watch new 6" $\frac{1}{32}$ Extra pad on Rubber plunger to see if it stops low spot print & broken Edges by Evening up pressure

15 See if Can stick paper label on Edge of record & have it water proof Same time

16 Edge & number 4 Rounds new record - I to inspect them - Looked & all

17 Lathes 9 & 10 to be kept running - Hand Inspector to watch & report any taken off & why & I to listen to print off deskards mould

18 - Immediate Experiment of 2 8" hardened disks for grinding Lamp & Lock - Bagaduce type & Closed to prevent Corporation -

19 - New loader for powder on moulds & Saving them

20 = Write Every ~~Wanted~~ 3 Days
Every working Day OK

24 = Hang paper

Note

20 = See Every ~~about~~ ~~Supply of~~
Chalk ~~of~~ ~~Extra~~ Newage Screen

21 - Have we an Aluminia
screener used by Cement Co
for sampling 180 Mesh Size

22 = Do we keep wear & spare
parts for Fuller Mech-
& have Mallory answer
about his giving us 2 Medals

23 Find storage for Hammer
Loaders grained up & use
space for increased Capacity

24 Devices for proper handling
of blanks, so not hurt Edges
or scratch surface

25 = Pulverizer the high Tins
+ bake + Let me have
4 Rounds

26 = Soak 1/2 dog accords
3 hours in water seeing
any holes in Mucic -

27 Make wear tests on bands
till 500 times - Then
1 quid is all we ever need
1/4" sufficient.

28 - Christensen make Cold
tests - Then oven heat
180 then Illness in Burner
use 1/2 dog -

29 Put on roof to Edged +
waterproofed accords
for weather test
also 1/2 dog lots of seals
30. places

31 = ~~Lubr gauge for Chip outs~~
~~in Edges of blanks~~

31 = Fred Ott making Demo OK

32 - ordered & now being done

note

33 OK done, must be not less than 7 - 8" w beat,

34 OK done — note

35 OK Recorded

36 OK works OK

32 = take off inspection limit on variations of Cartridge powder blank or Unwaxed

33 = test 4 Rounds 8 min Cool
4 " 4 "
Ordered

34 Req schedule 850° for 10 min
7 Cool — 4 Rounds
ditto 4 Rounds 850 — 8 min
7 cool
ditto 4 Rounds 850 6 "
7 Cool
ditto 4 " 850 15 "
7 cool

35 = 4 Rounds Rubber pad heavy
6" 1/16 thick

36 get mandrel & assembla
records for Edging
& Inspect for scraping

37 = Molded Ebony - OK —

Mole

40 — 575 000 Records Disc

37 = Also Ebony from Conteydeny for 6/44 formula also also Key & Acetal

38 Make some 1 min Vio Kaw for 4 Rounds No para or Sandma — Make Ear + wear tests

39 - Ditto 4 Rounds. Para but no Sandma

40 - Certain Maximum Storage Tycylcoins Dept

41 for Cylinder records Molded Cylinder 1522 B then Varnish + percent Hot air.

42 = Take up subject sheathing Hoffmans dept steel sides & overhead or members of truss, — Sprinkler system steel columns Skylights other places

43 - Make more dropping tools

44 = ~~new 6" x 1/32 mesh with Extra Vent at 3 positions 4 Rounds~~

44 Abandoned

Note

45 = Wash face second coat Alcohol side of hurt

Note

46 = Add one pair Tracked moulds to Lead 9 + 10

47 Now being made

47 get up complete list of forms & forms (Numbers for daily reports

49 abandoned

53 it was Collyman, has it there now —

48 = Put on the Thermometers

49 — Hoffman 4 rounds with 6" x 1/32 Emmanuelle on rubber disc but with hole in center exact size of Label —

50 = See how many rotating Varnish pots we get in use & how many wanted —

51 = Time the output of the Varnishers —

52 see if Record washed after numbering & Varnishing otherwise might get water in & swell Edge of Record

53 = Find out who need fuller Mill from Cement Co & who sent it back —

1118 E

One round 1522 B.
Reg Schedule Except
Cool Six minutes

Press 42 - Load 12

OK OK Spot looks like Copper dont sound.

OK OK 2 snapped out end - pull outs.

Veneer Discard

Com OK Veneer + Edge

Discard Veneer

Com OK Veneer

Veneer Discard

Discard Veneer

OK OK

Veneer Discard

Edge Discard

Veneer Discard

All discards are on Tape side -

41 %

1119E

One Round 1522B-
Reg schedule Except
Cool 5 minutes

Veneer Discard
Veneer Discard
OK
OK
Edge Discard
OK
OK
Veneer Discard
Com OK Veneer + Edge
Com OK Veneer
Com OK Veneer
Veneer + Edge doubtful
OK
OK
OK
OK

58%

1120 E

One round 1522 B
Req Schedule Except
Catal 4 numbers

Pieces 42 Loaded 7
Veneer Discard-all around
ok
Com ok Veneer 1/16
Com ok -Veneer 1/8 clean Label
Discard Veneer
"
"
"
"
"
"
ok
Veneer Discard
Veneer Discard
Pull outs (2) in music
Veneer discard
ok
ok
ok
Com ok Veneer 1/8
Veneer Discard
Veneer "

33%

2nd Round 1121 E

42 pieces
Load 6

OK OK low at Position 1 ok

Com OK Edge V

OK OK

Veneer DISCARD OK

Com OK Veneer 5

OK OK

Com OK Veneer 5

OK OK

alcohol out of mouth - Carelessness — negative

ok Discard

chip out of Edge blank in handling show Kinder DISCARD

ok Discard

Veneer OK silver spot ok

Com OK Edge

75%

1121 E NOTE

Low spots due to varnishing —

No low spots at 3

also note 1128 - low spot at 1 —

2 Rounds 1522 B.

1 mm Vis 1019

1 Coat all over after it's air dried put Extra Coat at Position # 3. — Ilen Baker 7 hours

Print Reg

Press 4 - Load 3

Veneer Discard OK

OK OK

Veneer DISCARD One

Com OK Edge V

OK OK

Veneer DISCARD OK

OK OK

OK OK

OK OK

Com OK veneer

OK OK

Com OK veneer

No low spots.

75%

June 5=22—16—

Start

Bring Mould from Assembly R	1.44
Press Loaded	1.45
Bring in Contact	1.46
Bring to 200° Fah	1.48
On Heat 12 min	2.00
Start to Cool	2.00
Cold-	2.07
Drop press Eject on truck	2.08
Returns Mould to Assembly Room	2.09

Total time one cycle 25 minutes

from press to Assembly Room
back to Press averages
11 Minutes —

2nd Lot Discards

1 — Scratched record
2 Dust on Varnished blank —
3 white dust 1 side — fibre on Var other side
4 — Scratched Varnish
5 Pull out,

only 5 of 1 Coat,

Inspection of Discards
1522 B 1 Coat,

1 = Inspector Carelessly let down
Replace point & diamond & spoil record

2 = pull out at feed line
3 " " "
4 " " "
5 = Piece wood. Either blanks or mould —
think was on mould =

6 pull out.
7 Dust —
8 Pull out.
9 one snap, shaved press } its in mould
10 " " } both same spot
11 long piece wood fibre Knocked out —
probably on. The ~~[illegible]~~ Var after or just
before baking
12 ok too many snaps —
13 = This is a 1522 But 3 Coat
Varnish — got mixed

Inspection of Discarded Called
1522B — SCRAP

3rd Lot of 12

1 — Crushed Edge NG
2 " NG
3 " NG
4 Veneer NG
5 Crushed Edge NG
6 Veneer NG
7 " NG
8 " NG
9 Edges Crushed NG
10 Veneer + Edges NG
11 Veneer — NG
12 " NG

All Properly segregated for Regrinding - Except Veneers which may in time be used for revarnish & Repaint.

1122 E

One round 1522 B.
Reg Schedule Except
Cool 8 minutes.

42 pieces - 9 Random

OK		6 min	41%
OK		5 "	58
OK		4 "	33
OK		8 "	100%
Com OK	veneer 1/8	% is Req —	
Com OK	veneer 1/8		
OK			
Com OK	veneer 1/16		
OK			
OK	low apart 3		
Com OK	Edge V		
OK			
Com OK	Edge V		

Wants 8 min cool
to be sure

100%

1123E

~~Hoffman to get Rubber Co to make one rubber with 6" 1/32 raise ~~ ~~of~~ with hole in~~

Hoffman to make four rounds using 6" 1/32 Extra Rubber on big rubber but with a hole cut out just size of label —

1124E 1st Round

Press 41 — 7 load

C ok — Veneer 1/8 + ck'd Veneer

OK ok

OK ok

OK ok

OK ok

OK ok

OK ok

OK ok

OK ok — Loose spot — 3

OK ok

OK ok

OK ok

100%

2 defects

1124 2nd Round

Press 42 Loaded 11

Com ok — 2 edge + Veneer slight

OK ok

OK ok

OK ok

OK ok

OK ok

C ok — veneer 1/32 slight

OK ok

OK ok

OK ok

C ok — veneer 1/32 very slight

OK ok

100%

3 defects

1124-E

2 Rounds of 152213 -

With Edge taken off more so soft fin part is off.

More to take off whole of soft fin part of Edge of powder blank to see if it would stop Veneer peeling off at Edge

42 Load 10

~~12 Regular Edges not rounded to check~~

Discard-Veneer

OK ok

OK ok

C ok — veneer 1/8

C ok — Edge 1/32 too 2" off

C ok — Edge ✓

OK ok

OK ok

C ok — Edge 1/32 short + 1 ✓

C ok — veneer

C ok — veneer 1/8 + Edges

OK ok

C ok — veneer

8 defects

91%

1125 E 1st Round 5 Mins at 850 42-load 13	2nd 6 Min at 850 42 load 13	3rd Round 8 Min at 850 lbs. 42-load 13	4th Round 10 Min at 850 42-load 13
OK OK Low spot 2	Com OK Edge V	OK OK	OK OK
Com OK Edge V + Veneer	OK OK	Edge Crushed OK DISCARD	OK OK
Veneer OK DISCARD	Com OK veneer	OK OK low spot 3	OK OK
Veneer OK DISCARD	OK OK	OK OK	OK OK
OK OK	OK OK	Veneer OK DISCARD	OK OK
OK OK	C OK veneer	OK OK	C OK veneer
OK OK low spot 3	Veneer OK DISCARD	OK OK	OK OK
OK OK	OK OK	OK OK	C OK veneer
Com OK veneer	OK OK	OK OK	OK OK
Com OK veneer	OK OK	OK OK	C OK Edge
Com OK veneer	Veneer + Edge OK DISCARD	OK OK	C OK veneer
OK OK	OK OK	OK OK	OK OK
		OK OK	
83%	83%	83%	100%

1125 E

1522 B.

Print jug a schedule one round 850 lbs pressure for 10 minutes

One round 850 lbs for 8 minutes

one round 850 lbs for 6 "

one round 850 lbs 5 "

This shows a very great range & margin — 10 to 12 min w OK —

Note

From this Experiment all nicked blanks Not more than 3/32 in towards music Can be Printed

1126 E

Select 1 Round of blanks Chipped at Edges which do not go in towards music More than ~~3/16~~ 3/32 Select by Image

42-Load 3	old	
Venier DISCARD ok	V ok	Edges Bad DISCARD ok
ok ok	V "	Venier pitted in feed line ok — Edges Same
ok ok	V "	
ok ok	V ok	
ok ok	V ok	
Copy ok Venier	V ok	
ok ok	V ok	
ok ok	old Edge ok	66 %
ok ok	Edge ok Same	
Venier DISCARD ok	Edge Same	
ok ok	V ok	

1127 =

Edge Discard also Veneer Gap
OK

Com OK Edge V + veneer

Com OK veneer $\frac{1}{8}$

Com OK veneer $\frac{1}{16}$

OK OK

OK OK Low 3

Com OK veneer

OK OK

Com OK veneer $\frac{1}{16}$

OK OK

Com OK veneer + V Edge

Com OK veneer $\frac{1}{16}$ + Edge Crushed

1127 E

One round 1522 B.

$\frac{1}{4}$ inch ~~[illegible]~~ of Edge has Extra Varnish after 1st Coat dried – Varnish Comes over Edge just a little,

The Extra Varnish

Makes it Coarse

1128

1st Round

Pieces 41 Load 3

Veneer ok — DISCARD — Low all around 1

Veneer ok — DISCARD — Low all around 1

Veneer ok — DISCARD — Low all around 1

Edge ok — Discard — Low all around 1

Veneer ok — Discard — Low all around 1

Veneer Veneer — Low all around " — DIS 1

Edge ok — Low all round — DISCARD 1

Edges ok — Low spot — 3

Com ok — Low all round 1

OK ok — Low all around 1

Com ok — veneer Low all round 1

Veneer ok — Discard — Low Spot of 3

33%

2nd Round —

Veneer Veneer + Low at — Discard 1

Pull out veneer — DISCARD

Edge bad Veneer bad — Discard low all 1

Veneer ok — Low at 1 all round — DISCARD

Com ok — veneer

Com ok — Veneer

Veneer Edge — Discard — Low all round 1

Veneer + Edge ok — Low at 1 — DISCARD

Veneer ok — Low all round — Discard 1

Edge + Veneer ok — Discard

Edge + Veneer ok — Discard

Edge bad ok — Low at 1 all round — Discard

16%

1128 E

Two rounds 1522 B.

The blanks varnished starting at the inside or Label + varnish outward —

Prevent Rep

Thin Varnish at Edge Bad —

Also apparently cause of low spots at 1/3 lbs caused by Thin Varnish —

NOTE

1129E

2 Rounds Varnished with
Varnish 1130E

See next page for
Record

1130E 42 – 14 load	2nd Process Press 40 load 15	
OK ok	OK ok	
Blank Cracked Veneer DISCARD ok –	Com ok veneer	
OK ok	Com ok veneer	
OK ok	Com ok veneer	
OK ok	Blank Cracked Veneer DISCARD ok	
OK ok		
OK ok low 1	OK ok	
Com ok Edge V	Com ok veneer	Dont help Veneer
Veneer DISCARD ok	OK ok	
Com ok Edge Veneer DISCAR ok	Edge DISCARD ok	
	Com ok veneer + Edge	
66%	66%	

1130-E

Hoffman make a quart of 1019 Varnish with Viscosity of 3/4 of a minute instead of 1 minute –

Note Surfaces not so good as Reg 1 min Var show tendency RO on start + it does not Cure the veneer problem at the Edge –

1131 E
42-14 load
1st Round

Com ok Veneer 1/8

Pull onto feed line - ok
Veneer + Edge DISCARD
ok

OK ok

Com ok Veneer

Com ok - Veneer

Veneer - Discard
ok
Veneer DISCARD
ok
Veneer DISCARD
ok
Veneer DISCARD
ok
Edge - DISCARD
ok
Veneer DISCARD
ok

33%

2nd Round

42-load 14 -

Veneer way on Music DISCARD
ok
Veneer pull on Music Edge DISCARD
ok

OK ok

Veneer, way onto Music also bad Edge DISCARD
ok

Com ok - Veneer 1/8

OK ok

Edge horrible + Veneer DISCARD
ok

Veneer ok

OK Com Veneer

Veneer DISCARD
ok
Edge bad DISCARD
ok
Veneer DISCARD
ok

41%

1131 E

Hoffman

Make quart
1019 with Viscosity
1/2 minute

Very Bad too much
Alcohol -

1132 E

2 Rounds Varnished with

1131 E Var

1133E

Print 8 Rounds of blanks having Edges Rounded by Moore

Print in different presses & Loads -

Print Rec

1st Round	2nd	3rd	4	5	Lot 28 6 Moore Edge	Lot 28 7 Moore Edge	8 Moore Edge
Press 30 Load 11	40 Press Load 10	Press 29 Load 16	Press 36 Load 9	Press 31 Load 5	41 Press Load 4	37 Press 6 Load	Press 42 Load 13
OK OK small Label PO	OK OK parallel ✓ Crack long	OK OK	OK OK	Veneer PO OK DISCARD			
OK OK	OK OK	OK OK	Com OK Veneer PO V V	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	Com OK Edge V V	Com OK Veneer PO ⅛ V	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	Com OK Edge V	OK OK	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK Chk Veneer Cant heck	OK OK	OK OK long parallel Veneer Crack	Com Com up Veneer PO Slight	OK OK
OK OK	OK OK	OK OK 2 Chk Veneer	OK OK Parallel Veneer Cracks	OK OK	Com OK Veneer PO Small	OK OK	OK OK
Com OK Edge not broken out yet ✓	OK OK ⅛ of Edge Crumbled long	OK OK	OK OK parallel Veneer Cracks - Probably Edge	OK OK	OK OK	Veneer PO OK Small DIS	OK OK Veneer PO Very slight not Edge Edge
Com OK Cracked ✓ Type probably Edge no PO		OK OK		OK OK	Com OK Edge ⅛ Veneer Chk	OK OK	OK OK
Com OK Veneer not Chk PO.	OK OK	OK OK	Veneer PO several OK DISCARD	Veneer PO OK PO DIS	OK OK long V chk long V CK	OK OK	OK OK
OK OK slight ✓ Crack	OK OK	OK OK	OK OK	Veneer PO " " DIS	Com OK Veneer PO Small	OK OK	OK OK
OK OK chk Veneer long	OK OK	Veneer PO Edge broken BAD	OK OK	OK OK	OK OK V chk	Veneer PO OK DISCD	OK OK
Veneer PO OK probably Edge	OK OK	OK OK	Veneer PO much OK DISCARD	OK OK	OK OK	Com OK Veneer PO	OK OK
	OK OK		Spec - knocker OK DISCARD		OK OK V crack slight	OK OK	Edge ck not PO OK Veneer PO
1 Veneer PO	no Veneer PO 1 Edge slight						
91%	100%	91%	75%	75%	100%	83%	91%

1134 Round 1st	2nd Round	3rd Round	4th Round
42-load 12	41-load 2	42-load 9	41-load 5
OK OK	Com OK Edge	OK OK	Com OK Edge V.
Com OK Veneer PO	Veneer OK Edge	OK OK	Com OK Edge V vv
OK OK	Veneer OK V DIS	Com OK Veneer PO	OK OK
Com OK Edge small	OK OK low 3	Com OK Edge.	OK OK Veneer long ck
Edge Bad OK DIS	OK OK	OK OK	OK OK
Com OK veneer cks	OK OK low spot 2	Com OK Veneer PO	Edge OK DISCARD
Com OK Edge	OK OK	Com OK veneer ck	OK OK
Com OK veneer cks	OK OK	OK OK	OK OK
OK OK	Com OK Edge V	OK OK	OK OK
OK OK	OK OK	OK OK low 3	OK OK veneer ck long
OK OK	OK OK	OK OK	OK OK low spot 3
Edge OK DISCD	OK OK	OK OK	OK OK
			OK OK
83%	83%	100%	91%

1134E

4 Rounds on blanks 1522X with new load of chalk with 8% Lime

Print Reg

Pulp	50.0 %
Chalk	37.5
	12.5
	100.0

This Chalk OK —
Reexamined Nov 27/16

Mostly fine V fine + VV fine surfaces
+ all Satisfactory good starts no RO —

Monday Factory % 1522B

83.6%

out of 1739 Oks –
The Edgers apart 253.
by the handling –
all done on Bengle
Edgers —

10 Blanks 1522B

Varnished on Oth Machine

OK OK bag apart, fair amt.

OK Can hear – loose apart bad

OK OK

OK OK

OK OK

OK OK

C OK veneer + Edge ✓

C OK veneer or Edge

OK OK

OK OK

91%

Another round by Fred Ott. felts
only on Each end - $\frac{1}{4}$ thick -
12 = Wooden rounded Edge blanks

OK OK no serial Nos etc
OK OK "
OK OK "
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

100%

Hard Experiment

Records
Ediing 152213 on Mandrel
Multiple -
Inspect for serial numbers
& engraving

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

This is the way
E

100%

2nd Round

1 — Veneer — will reprint
2 " "
3 Veneer will Edge
4 Veneers — will Edge
5 Veneer will reprint
6 " " Think OK by Edging
7 " Try Edging — it will reprint
8 Veneer will reprint,
9 " "
10 " + Edge will reprint + Edge
11 will Edge OK —

5—23—16

Discarded by Eye Inspector
CRACKED EDGE

1 Discard
2 — Not cracked out — ~~the~~ Edge ~~on~~ it.
3 — Probably do for reprint
4 = " " "
5 Veneer only will reprint
6 " "
7 " "
8 " "
9 Discard Edge
10 Veneer will reprint.
11 Veneer + Edge will reprint + Edge
12 Veneer — will reprint.

2nd Round Edging Mach Discards

1 = OK - only 1/32 nick
2 7/16 chips in 1/2 mach to 1/8 feed line Edger done it
3 7/16 " in to 3/16 of feed line Edger done it
4 5/16 - chpd in 1/16 Edger
5 Edged to 3/16 - chipped in 1/16 - Edger
6 5/16 - chipped in 1/32
7 3/8 - chpd to 1/16 of feed line - Edger
8 7/16 - big chip within 1/8 feed line "
9 5/16 - 1/16 chip - Edger
10 5/16 1/16 chipd in -
11 3/16 - chipped in 1/16 of feed line Edger
12 5/16 " in 1/16 - Edger

Thick 1/2 accepted by the Edging Machine -

Good Records passed by Eye Inspection which broke out in Single Edging Machine

1 = Edged to 1/4" & broke out of oks coming down to 1/4"
2 - 5/16 - then chipped out 1/16 2 planes
3 1/4 - broke out 1/16 - looks like a good veneer originally
4 5/16 - broke out 3/16 - not originally in but by machine.
5 - 3/8 - broke out to within 1/16 feed line looks like machine -
6 5/16 chipped in 1/16
7 5/16 1/16 chip 1/2 long done in Machine
8 5/16 chipped to 1/16 feed line done in Edger
9 3/8 " 1/4 - veneer pushed off Edger
10 5/16 " 1/32 done in Edger
11 5/16 " 1/32 "
12 5/16 " 1/32 - veneer stripped done by Edger

1135 E Press 42 Load 16

OK OK

Com Com | op cracked Edge in situ

OK OK

T Top OK Veneer PO

T Top Com OK veneer PO, Edge poly

T Com OK veneer PO "

OK OK

B Com OK Edge v v

B Com OK Edge Good

| OK Veneer PO DISCARD

T Com OK Veneer PO + Edges V

OK OK

75%

Press 41 Load 8

Blank stuck on Mould

Very hard get off -

OK OK

T Top OK Edge Bad DISCARD

OK OK

T Com OK veneer PO

T Com OK veneer PO

T Com OK veneer PO

B | OK Edgeband Discard

B | OK Edge DISCARD

B Com OK veneer PO

T OK veneer PO Discard

B Com OK veneer PO

T OK Edge Very bad Discard

58%

NG

1135 E

Huffman - make

Quart Van no free phenol

no Sandrac - 7 1/2 6/4

1% Para

Vacuity 1 minute

Blanks stick very

hard to Mould

Varnish Cant be used

1136E

2 Rounds, with Varnish
No 1134 E 1 Coat,

Print Regular

1137

1st Lot put Thru Mill
Required 2 ½ hours for 1 gal

But Another lot put
thru same mill twice
Required only 2 hours
for twice —

14" Mill —

Twice through is very very
much finer than our regular
Var & satisfactory
I note fibre in —

1137E

Hoffman takes Reg
1019 Var 1 min Viscosity
to Newark to grind in
a Mill — try it
2 Rounds for surface

Lot A once thru Mill

Lot B twice thru Mill —

Lee Cook

NOTE

Low spots at 1 2 & 3
position due to Varnishing
starting at Edge to Varnish
+ proceeding inwardly
Low spots at 3
Reverse & start at
hole low spot all
at 1 + all around
DEE 1121 + 1128 E.

Hoffman

Mouldo Recd	Top	Bot			
18th.	8	10			
			Set Ring		
23	41	26	247	23	5003
24	71	75	285	24	4935

Daily Production 1523 B Blanks

18th 2306

Monday 22 - 1522 Morelos Road

	Monday	Tuesday	Wed	Thurs	Friday	Sat
On hand	161 sets	176 sets				
Bottoms Tops	22 Bot 7 Top	22 Bottom 7 Tops				

Luke

	Top plates	Bottom
May 19	17	25
Luke 20	25	9
22	27	23
23	24	36

Blankets Made	Leg 5	Leg 6
Saturday 20th	2156	888
Monday	2184	1507

[ITEM(S) FOUND IN BOOK]

Re examination 1134E

fine -

1 V fine -
2 V fine -

3 VV fine surface
4 Extra VV ~ Dimmed

5 - V fine
6 VV fine -

{ 7 fine -
{ 8 V fine -

{ 9 VV fine -
{ 10 VV fine Extra -

[ITEM(S) FOUND IN BOOK]

1534-1141 E B.

233-239	.006
242-247	.005
238-243	.005
230-241	.011
233-238	.005
218-220	.002
232-246	.014
228-243	.015
228-250	.022 ✓
218-232	.016
246-256	.010
233-238	.005
233-249	.016
228-253	.025 ✓
230-239	.009
211-221	.010
231-238	.007
231-240	.009
231-247	.016
240-247	.007
238-248	.010
228-245	.017
226-251	.025 ✓
226-246	.020

Pressed with 1/8 x 1/4" disc in center 200 lbs. pressure.

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 15
Notebook, N-16-05-15.2

This notebook was used by Edison during May-June 1916 for notes on experiments to improve the surface quality of Edison disc records. There are also notes by Archie D. Hoffman. The entries pertain primarily to experiments 1138E to 1188E. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted. An entry entitled "discarded moulds" provides the number of molds discarded during the week of May 15-20, along with notations about their problems and defects. Additional entries relate to experiments on edging and edging tools, as well as a "special experiment" involving prints of "Gigue" recorded by violinist Albert Spaulding. There are also entries regarding problems with the powder in the record blanks and crooked holes in the blanks, as well as notes on the number of discarded blanks and why they were discarded. Some notes are in the form of instructions to Hoffman. Inserted into the book is one loose note, probably by Hoffman. The front and back covers are labeled "No 15." The pages are unnumbered. Approximately 140 pages have been used.

12	100 %
11	91
10	83
9	75
8	66
7	58
6	50
5	41
4	33
3	25
2	16
1	8

In Case of Trouble

Note 1147
second page after 1164
~~1170~~

Edging Experts 12 in Lot

OH_A	OH B_
OK OK	OK OK
OK OK	OK OK
nick in to be redged OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
	OK OK
	OK OK
91%	/13 100%

C Edging	D off Edg	E off.	F off.	G off-	H Fred off	J off	Edged broken Edge + Veneers To 1/4" of music marked places Fred off - test -
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK 1 Mark
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK time nick 1000 in Record	Repoducer Knocked 1/16 sliver out -
OK OK 1/16 nick	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK as far as Edg DISCARD
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	Repoducer broke Sliver out DISCARD
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK veneer in Record	Broke Sliver
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK nick 1/16 in Rec	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	Edger Scratched it OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	Slivers out OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK 1/32 Sliver.
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	
13	14	13	13	13	13	12	
100%	100%	100%	100%	100%	100%	100%	58%

Can Edge 6 Mandrels hour

1138

Press 41 Load 4

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK slight ck near edge of Veneer

Com OK Veneer

OK OK

OK OK

OK OK

100%

42 Load 9

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK Veneer Ck 7" Long

OK OK

OK OK

OK OK

OK OK Veneer Ck 4 + 3 Long

100%

1138 E

Hoffman Edges of 24 152213

blanks

Varnish P

Run Reg

2nd

Duplicate Thus

1139E

Press 41 Load 10

OK OK

T Veneer PO Discard OK

B Veneer PO Discard OK

B Edge – in place Discard OK

OK OK

OK OK

B Com OK Edge V V

T Veneer OK DISCARD

T B Com Com veneer PO

OK OK

OK OK

T Com OK veneer PO

42 – Load 15

OK OK

OK OK

OK OK

T Com OK veneer PO

T Com OK veneer PO

T Com OK veneer Pout

OK OK

T B Veneer " PO DISCARD

T Com OK Veneer PO

OK OK

T Edge bad OK Discard

OK OK

68%

Thus to the 1½ min

where Pull Out looks grey – Don't think it clinches as well as 1 min

1139E

Hoffman

Make Can of 1½ minute Viscosity Varnish 1019

Also Can of 2 min Viscosity,

No advantage in 1½ goes 1 min

Surfaces about same

Most have bad start probably on account of sticking to Edge & Cleaning

Otts Machine so far

is No good

Dont put Varnish on

Even —

1140 E

1 Round varnished in Otts

machine — Rubber brushed

Press #2 Load 1

| Edge — DISCARD
ok
| Veneer DISCARD
ok
Com ok Veneer
| Finger Mark — Good spots Low Var — DISCARD
ok
| Veneer DISCARD
ok
Com ok Veneer
OK ok
Com ok Veneer
Com ok Edge + Veneer
Com ok Edge + Veneer
OK ok
OK ok

66%

1141E

Hoffman to make 2 Rounds of blanks with 2" X $\frac{1}{4}$" washer in Center of the Top plunger, bring to contact Cold + give 500 lbs
then lower + remove washers
+ Run Regular
Then Calliper blanks -

DISCARDED MOULDS 1 WEEK May 15 to 20 1916

Total	359
Dent	38
Crackle	74
Knocks	9
Knocks & Crackles	26
Spitty & Crackles	6
Surface	23
Buckle	50
Bruise	25
Hole	29
Repair Spot	9
Label	7
Run Out	2
Moisture Spot	2
Plating Defect	7
Due to Experiment	10
Porous	9
Scratch	15
Steel in blank	2
Mechanical injury	2
Scrape	1
Stained	2
Tremble	3
Finger Mark	1
Wrinkle	1
Celluloid defect	4
Pin pressed in mould	2

A single Edger now edges
800 Records in 10 hours –
Can possibly edge that
number of blanks if we
find it necessary

1st Round 38-L 1

OK ok Ok dull pt
Com ok Edge
OK ok Dull Eck
Com ok veneer
OK ok Dull ck
OK ok "
OK ok "
OK ok "
OK ok "
OK ok "
Com ok Veneer "
OK ok "

100%

2nd Round 40-L 9

OK ok Dull ck
OK ok "
OK ok Little Low 1
OK ok " Low 3
OK ok " Low 3
OK ok " Low 3
OK ok " Low 3
OK ok "
OK ok " Low 3
OK ok "
Com ok veneer many cracks
OK ok " Low 3

100%

3rd 32 Prem L 13

Com ok veneer 1/8
OK ok
Veneer ok DIS'D
OK ok Low 3
OK ok
OK ok
OK ok
OK ok Low 3
OK ok
Com ok Edge Low 3
Com ok veneer
OK ok
OK ok Low

91%

Paid no attention to Cracks on rounded part

4th 30 Load 11

Com ok veneer 1/32
OK ok Low 3
OK ok
OK ok Low 3
Com Low veneer " 1/32
OK ok Low 3
OK ok
OK ok
Pull O fend line ok DIS
OK ok
OK ok
Veneer Pullout ok DIS

83%

Ditto

1138 E

Duplicated

1/16
3/32

5th Rounds

Prem 36-2

OK ok Low 2+3
OK ok low 3
OK ok
OK ok Low 2+3
OK ok
OK ok low 3
OK ok
Com ok veneer 1/16 low 3
OK ok Low 3
Veneer ok DIS
OK ok
OK ok low 3

91%

Total 93%

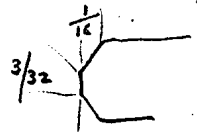
All balled up

Didn't Carry out instructions

Note, not Enough Var at 3 position

1142E

4 Rounds of 1138 blanks
Varnished in O'Ks machine with
velvet wiper—



Print Reg

41-L 13

Edge Crushed DISCD
OK
Edge " DISCD
OK
Veneer DISCD
OK
OK
OK
OK
OK
Edge Cod - DISCD
OK
Small PO at feed DIS
OK
Pull out feed line DIS
OK
OK
Veneer DISCD
OK
Com Veneer
OK
Pull out feed DIS
OK

33%

42-L 8

Veneer DISCD
OK
Pull out feed line DIS
OK
OK
Com Edge
OK
Com Edge
Com "
OK
OK
Veneer DIS
OK
OK
Veneer Ckd into machine DIS
OK
Pull out feed line - DISCD
"
Pull out feed line DIS
OK
Edge DISCD
"
Terrible Edge DIS
OK

41

5-25-16

1143 E

Nothing thicker than 1 min Vis works good with Reg brush by hand

2 Placards

Varnished with 1 Coat

2 hour Bake

1139 E Varnish 1019

2 min Viscosity

Edges not recended

NOTE

With this high Viscosity we get Pull outs on smooth part Edge of blank or at feed line - about 1/32 wide - streak parallel several inches long probably due to impossibility of brushing Evenly with such thick Varnish

1144

OK OK X dull edge of Heads Ckd

Corn OK X

OK OK X dull edge part Ckd

OK X " " "

OK OK X " " "

OK OK X " " "

OK OK veneer X - DISCARD after Edging

OK OK X " " "

OK OK X " " "

OK OK X " " "

OK OK X Veneer 1/3 " "

OK OK X " " "

must be razedged further

100%

X means OK after Edging

41 Press load 7

OK OK veneer at edge 1/64 - many clean

OK OK Dull part Ckd

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

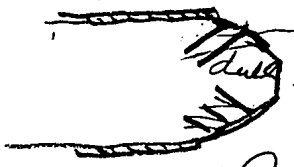
100%

1144 E

Two rounds Varnished to the Edge only - of 5/32 bevelled

Print Reg

Bevelled too much by mistake



Cracked in dull part of bevell -

Round 1

After Edging No cracks show

All OK Except one - veneer pulled off at Edge -

at 2 were not edged in far enough

41—Load 12
Edges on dull allocks

OK OK — brush mark ok

OK OK

Veneer | lung op. 1/16 in So wont Edge — Discard

OK OK

OK OK

OK OK

OK OK — low all around 3

OK OK

OK OK

OK OK

Veneer wont Edge ok 1/16 — Discard

OK OK

83%

42—Load 7

OK OK

OK OK

OK OK

OK OK — Low 3

Cond ok — Veneer Po will edge

OK OK

Veneer will not Edge ok — Discard

OK OK

OK OK

Cond ok — 1/32 Crack in Veneer

OK OK — bad brushing

Veneer will not Clean up ok

83%

1145 E

2 Rounds 5/32 - Varnished way over the Edge -

Present Req —

These are not as good as those only Varnished to Edge

NOTE

gets over Edge + Cracks strains Veneer

Tests of Tracked Moulds 1st 1/2 mach tested

E 344 Surface fair shade RO

4625A "

343E

4587A. Some RO poor surface

101G * fair surface shade RO

3750 B2 * no snaps surface loud quite a R.

312E NG Roughness

326E Start rough then fair back has RO

*) selected — to test surfaces —

1146 E

Time Test
put over Top of Case
in Envelope

One round of 15225 blanks, 1 Coat 1079 Var

Vis 1 min run thru entire factory process ready for Stock room — / Eye tested only —

Tested for surface 5-25 — 16

Surfaces -		Retested July 12
Start smooth but loud	3	
" " Spitty loud	1	
" good-satisfactory	7	
Very good	6	
Very Very good	7	
General Surfaces loud	0	1
" Lumpy but good	6	2
good satisfactory	9	2
Extra good-Very good	5	12
Very Very good	4	7

1147E 2nd Round 42 – 10 Load	3rd Round 41 – Load 1	4th Round 41 – 13 Load	5th Round 42 – 15 Load
OK OK	OK OK	OK OK	OK OK
OK OK Bad low Edge ckd 3	OK OK	OK OK	OK OK
Edge ckd DIS	OK OK	OK OK	OK OK
Blank ckd DIS ½" in	OK OK low 2	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Very low no primer 3 OK Discard
OK OK	OK OK	OK OK low 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	Blank ckd 1" in	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
Low OK Edge ckd	Blank ckd 3/8 in	OK OK	OK OK
	OK OK	OK OK	Blank ckd 1" in
		OK OK	
75%	83%	100%	Mottled Surf 83

1147 = Still not as good as Hand Varnished

Rounded Edge 1522.B

Brushed on Otto machine with Velvet —

Press 41-Load 4 – all released free + OK

OK OK
OK OK
OK OK
OK OK low 3
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK low 3

NEW? S S

Blanks Cracked 5/8 to 1" in 4 cases in 24 records

Average 89.5

Looks like too much chalk + mistake in mixing

100%

Rounded Edges

Rags coming thru factory

Rounded Edge 1522B

38 Press 42	31-46	P-29 Load 15	Press 30 Load 7
OK OK	OK OK May 29	Com OK	OK OK
OK OK May 29	OK OK	Edge OK Veneer DIS	OK OK
OK OK	OK OK	Edge OK Line PO DIS	OK OK May 29
OK OK	OK OK	May 29	OK OK
Com OK veneer	Com OK veneer	OK OK Low 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK Low 3	OK OK	Com OK veneer
OK OK	OK OK	OK OK	OK OK
OK OK	Com OK Edge	OK OK	OK OK Dirty Moved Machine
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK Low 3	OK OK Low 3	OK OK
OK OK	OK OK	11	OK OK
Com OK Veneer bumpy OK + VV Edge			
Com 2 100%	Com 2 100%	82%	Com 1 100%
10	8	1 6	10

next page

5th Round May 25 Reqfactory Product Press 40 < 3	May 26 Reqfactory 37 - Load 1	May 26 Reqfactory Product 27 - Load 10	May 26 Reqfactory 35 Load 15
OK	OK	OK	Veneer OK; Ven
OK	OK	OK	OK
OK	OK	OK	OK Low 3
OK	OK	OK	OK
OK	OK	OK	OK Low 3
Com OK Veneer	OK	OK	OK
Com OK Veneer	OK Low 2+3	OK	OK
OK	OK	Com OK Veneer	OK
OK	OK	OK	Com OK Veneer
OK Low 3	OK	OK	3 Swings Low, 1 big OK 2
OK	Com OK Veneer Edge	OK	OK
Com OK Veneer	OK	OK	OK
OK	Veneer OK PO	OK	OK Low 1 Varnishing bad
	Ven. PO OK in house	OK	OK
			OK
Com 3	Com 1	1 Com	1 Com
100%	83%	100%	91%
8	8	Fshers 95% 11	7

May 26 Reqfac 39 - Lot 5	May 27 Reqfac (Reworked) 30 - Lot 13	May 27 Reqfac (Reworked) 36 - Load 12	May 27 Reqfactory 32 - 31
Veneer OK	OK	OK	OK
OK	OK	OK	OK Low 3
OK	OK Low 3	OK	OK
OK	Com OK Crack in Veneer	OK Low 3	OK
Com OK Ven	Com OK Veneer	OK	OK spec in house Bout Seam
Com OK Veneer	OK Low 1 Low 1	OK	OK
Com OK Veneer bad Blank not Rounded	OK	OK	Com OK PO on Label Com fax with Ven
OK	OK	OK	OK Low 3
	OK	OK	OK Low 1 Low 3
Ven OK Blank not Rounded	OK	Com OK Veneer	OK Low 2+3
OK	OK	OK	OK " 2+3
OK	OK Low 3	OK	OK Hook not Centered Sticky
OK	OK	OK	OK
Com OK Veneer			
4 Com			
83%	100%	100%	100%
2 Blanks Not Rounded 91.2 Fshers			C393

1137EA

A

42-Load 11

OK OK

Com OK — Veneer

Com OK — Edge

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

Com OK — Edge + Veneer

100%

2nd Roomed

41-Load 13

Com OK — Veneer OK

OK OK

OK OK — Veneer OK

Com Com — Veneer

Com OK — Veneer

OK OK

OK OK

OK OK

OK OK

OK OK

Com OK — Veneer

Com OK — Veneer

100%

1137E

Reg 1019 1 min Vis ground once thru the Mill at Newark + marked A + B

41-Load 16 B

Com OK — Veneer

OK OK

OK OK

OK OK

OK OK

OK OK

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

OK OK

OK OK

Surfaces A+B Same — Dont appear 6z any better than Reg Lamp OK

100%

B Press 42 Load 2

OK OK

OK OK

Com OK — Veneer

OK OK

Veneer + Edge OK DIS

Com OK — Veneer

Com OK — Veneer

OK OK

CRACKED BLANK

OK OK

Com OK — Veneer Edge

OK OK

83%

Special Experiment
with Load _____

This load has one record Tracked to test surfaces –

Also "Gique" a Spaulding record with which is always use. Blanks the face of which is full of steel, The opposite time should also be tested as steel only occurs on one face

In Gique I listened to 3 dupes & there appears to be no snaps in mould surface at start is a little loud but soft & good in music –

The opp side surface not so good its lumpy & start not good –

See next page

No 1 Record 38-Load 9

Surfaces –

Gique
Otherside –
↓
Old Ky Home

Ky No 1 – Surface. Only 2 or 3 light snaps dull – lumpy
Gique 1 snap at interval & 1 after starting 1st point lumpy

Will keep these Records & Cracked Record –
on Rack till I get a Cat –
Ky – had an Eye spot 005 didnt record –

34th Print, Gique same snap at interval + same after start of 2nd point surface lumpy
Old Ky. ||||| light snaps surface lumpy } OK

47th Run no noticeable change – Gique good surface ✓

72 Run Ky Very horrible start – about same snaps in Classic
Gique – about doz more weak snaps none loud – The coating surfaces are about same –

May 27 Factory Records	May 27 Factory Records	29 May 59	29 May Lot 57
36 — 16 Load	28 — 13 Load	31 — Load 10	32 — 2 Load
OK OK	Com OK Edge	Blank Crooked Edge 27/2 long	OK Lines 3
Com OK Edge	OK OK PO feed lines OK	Com Com Veneer	Com OK Veneer
Com OK Veneer Edge	OK OK	Veneer OK Dis	Discard Veneer OK
OK OK	OK OK	OK OK	OK OK
OK OK	PO feed lines OK	OK OK	Veneer OK DISCARD
OK OK	OK OK	Com OK Veneer	Com OK Veneer
OK OK	OK OK	OK OK	Com OK Veneer
OK OK Lines 3	Com OK Veneer	OK OK Dirty alcohol	OK OK
OK OK	OK OK Lines 3	OK OK	OK OK
OK OK	OK OK	OK OK Low load 2	OK OK
OK OK	OK OK	OK OK	Veneer Pull Back OK feed lines DIS
OK OK	OK OK	OK OK	ditto
100%	91%	83%	66%

29 May Lot 17 Press 7 19	29 May Lot 59 38 — 10 Load	29 Lot 18 10 — 24 Load	29 May Lot — Press 3 — Load 18
OK OK	OK OK	OK OK	OK OK
Com OK Veneer	OK OK	OK OK	OK OK
Com OK Veneer	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Com OK Veneer
PO on Mirror OK DIS	OK OK	OK OK	OK OK
OK OK	Com OK Veneer	OK OK	OK OK
OK OK	OK OK	OK OK	Com OK V
OK OK Swap in mirror	OK OK	OK OK	OK OK
OK OK Lines 2	OK OK	OK OK Lines 2-3 weak	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	PO feed lines OK ✓
	OK OK	OK OK	
91%	100%	100%	91%

Continued | Discard

Reg face May 29 Press 32 - Load 4	May 29 SPECIAL Press 35 Load 2	Reg face May 29 42 Load 12	Reg face May 29 23 Load 8 Pieces
OK OK	Com OK (Edge Cracked)	OK OK	OK OK Loose 2+3
Com OK V	OK OK	OK OK	Com OK PO feed line far from Mark
Com OK V	PO feed lines OK D10	OK OK	OK OK Loose 7
OK OK	OK OK	OK OK	OK OK
PO feed lines OK D15	OK OK	Com OK	Com OK
Com OK Loose 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
PO feed lines OK D10	OK OK	OK OK	OK OK Loose 3
Com OK V	OK OK Leg Spot Lock Van 1	Com OK V	Com OK V
OK OK	DISCARD Lock Van at Edge	OK OK	OK OK Loose 3
Com OK	DISCARD Piece steel.	OK OK	OK OK
Com OK Loose 3	OK OK	Com OK	OK OK
	OK OK	OK OK	PO feed lines OK poor, varnish
	Not Reg		
	75%		
83%	Damaged die blanks Carefully shaved by blanksman Otis Machine.	100%	91%

May 29 Reg face 37 - Load 7	May 29 Reg face 37 Load 7	May 29 - Factory Rec 29 - Load 7	29th May Reg Fac Press 8 Load 24
OK OK	OK OK	OK OK	OK OK
OK OK Loose 3	OK OK	OK OK	OK OK Loose 3 allowance
OK OK " 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK feed line PO not OK
Com OK V	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
C OK V	OK OK	OK OK	OK OK
Com OK V	OK OK	OK OK	OK OK
OK OK	Com OK	OK OK	OK OK
OK OK	OK OK	Com OK V	OK OK
Com OK (ckd) V	PO feed lines OK both sides	OK OK Loose 3	PO feed line also OK Ckd Van — Van over edges
Blank Cracked	ditto.	OK OK	OK OK Van — Van over Edge —
91%	83%	100%	91%

NOTE

Our Regs 1522B

1 Coat 2 hours

1 Min Vis –

250 times placed

OK Sounds OK + under

Micro Rem hardly detect

any way on hills –

good for 500 or more

1148E

Four rounds using regular

Transfer Terminals 1 minute

Vocoding –

Sheet Reg

8% Line in Check

Eye – Mac + final

72% OK — UPS Trans

~~4 Rounds by me~~ Not using voice up

stairs when

this done

May 29 Press 42 Load 14	May 31. Press 9 Load 27	May 31 Press 6 Load 20	May 31 Press 10 Load 4
OK OK	Conv OK Edge V Small	Conv OK	OK OK
OK OK	OK OK	OK OK Low - 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK Low - 3	Conv OK Veneer Crk. [illegible]
OK OK	OK OK	Conv OK	OK OK
OK OK	OK OK	OK OK	OK OK Low - 3
OK OK	OK OK	Dis OK Veneer	OK OK
OK OK	OK OK Low - 3	OK OK	OK OK Low - 3
OK OK Edge V Small	P.O. [illegible] OK Crk. Var.	OK OK Low - 3	OK OK
OK OK	OK OK	OK OK	Conv OK Veneer Pull of Edge
Conv OK Pa-fred lines	OK OK	OK OK Low - 3	/10 Blk.
OK OK	OK OK	Dis crk. Blk. Veneer	100 %
100 -	91 %	83 %	

May 31. Press 10 Road 18 Rot 66	May 31 Press 5 Road 25 Rot 65	May 31 Press 29 Road 6 - Rot 69	May 31 Press 8 Road 27 Rot 66
Conv OK Veneer Pull Edge	Conv OK Veneer	OK OK	OK OK
OK OK	Dis Veneer Pull of Dis Dis	OK OK	OK OK
OK OK	Dis Veneer Crushed Edge OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
Conv OK Veneer	OK OK Low - 3	OK OK	OK OK
OK OK	OK OK	Conv Conv Veneer	OK OK
OK OK	Dis crushed Edge + Veneer OK	OK OK	Dis OK Veneer
OK OK	Conv OK Veneer	OK OK	OK OK
OK OK	Dis Dis crk. Blk.	Dis crk. Edge + Veneer OK	OK OK
OK OK Low - 3	Dis OK Veneer	Dis OK Veneer	OK OK
OK OK	OK OK	Conv OK Veneer	OK OK
Dis OK Veneer	Dis Dis Veneer + Crushed Ed.	OK OK	OK OK Low - 2 - 3
OK OK			
91 %	50 %	83 %	91 %

May 31 Press 9 Road 30 - Rot 69	May 31 Lot 40 31 - Press 36 - 2	May 31 Lot 40 May 31 37 Load 4	May 31 Press 42 Load # 11 Rot 69	May 31 Press 11 Load 18 - Rot 69	May 31 Press 1 Load 17 - Rot 69	May 31 Press 40 Road 8 - Rot 69	June 1 Press 8 Road 28 - Rot 68
OK OK	Veneer OK DIS	Edge Crushed OK DIS	OK OK	OK OK	OK OK	Com OK Veneer	Dis Broken Edge OK
OK OK Dis Pull only original lines OK.	Com OK Veneer	PO Feed lines Veneer	Com OK Veneer	OK OK Dis Veneer	Com OK Veneer	Com OK Veneer	Dis Veneer Com Veneer
OK OK	OK OK	Com OK V	OK OK	OK OK	OK OK	OK OK	Com Veneer
OK OK	OK OK	Com OK Edge	Dis Dis Veneer + Crushed Edge.	OK OK	OK OK	Com OK VENEER	Com Veneer
OK OK	Com OK Edge	Com OK V	Com OK Veneer	Com OK Veneer	Com OK Crushed Edge	Com OK Veneer	Com Com Veneer
OK OK	OK OK	Com OK Veneer	Com OK Veneer	OK OK	Com Com Veneer	OK OK	Dis Broken Edge OK
OK OK	OK OK	Veneer DIS OK	OK OK	Com OK Veneer	OK OK	Com OK Crushed Edge	Com OK Crushed Edge
OK OK	Com OK Veneer	OK OK	Com OK Edge crushed	OK OK	OK OK	Com OK Veneer Edge	Dis Veneer OK
OK OK	Com OK Veneer	OK OK	Dis Dis Veneer Crushed Edge. PO on feed lines	Com OK Veneer	Dis Crushed Edge Dis + Veneer P. Off	Com OK Veneer	Com Com Veneer
Com OK Veneer + Crushed Edge	Com OK Veneer	OK OK	Dis Crushed Edge OK	OK OK	Com OK Veneer	OK OK	OK OK
OK OK	OK OK	Com OK V	OK OK	Com OK Veneer	Com OK Crushed	Com OK Veneer	Com OK. Veneer
OK OK	Com OK Veneer	Com OK	Dis Broken Edge Dis PO misfed lines	OK OK	Dis PO on feed lines OK	OK OK	OK OK
	PO OK feed lines	Com OK					Com OK Veneer
	These two Pounds of Rek Baked 1½ hrs						
91%	83%	75%	66%	91%	83%	100%	66%

1148 Lot 67
Pieces 31 & 4
5-31-16

	31-4 Round	35-Round 4	42-4
Com OK	OK OK		OK OK Var too thick Low — 1 or 3
Edge — V	Com OK V+E	Veneer OK Dis	Com OK
OK OK	OK OK	OK OK	OK OK
OK OK	Com OK Edge V	Com OK Var 3 Low 3	OK OK
OK OK	OK OK	Veneer OK	OK OK
Veneer pulled out Low 2/oot 3	OK OK	OK OK Low 1	Com OK Edge
Com OK V Veneer	OK OK	OK OK	OK OK
OK OK Sweep	OK OK	OK OK	OK OK
OK OK Low 3	Com OK	OK OK	Com OK Var 4
Com OK V+E	Veneer OK Dis PO Veneer	OK OK	Com OK Edge
Veneer OK V+E	Com OK V Veneer	OK OK	OK OK
OK OK Low 3	Com OK V	OK OK	OK OK
OK OK	Veneer OK Dis	Edge OK — Dis	Veneer OK Dis
83%	83%	75%	91%

83%

1148 E

Four rounds using regular transfer Var 1 mix Viscosity no Lampblack —

NOTE

Prints dont look as even + velvety as with Lampblack ?

The Varnish seems too thick some fry out on Edges —
This is because no Lampblack which increases Vis + this having none the Vis was got up by using thicker Varnish —

1149 E June 1	June 1	June 1	June 1
Press 39 hand 10	Press 4	Press 30	Press 35
Lot 72	Brad 10 Lot 72	Brad 10 - Lot 72	Brad 10 - Lot 72
OK OK Rev - 3	OK OK	OK OK	OK OK
Conc OK Rev - 3	Conc OK V. cracked	Conc OK crushed edge	OK OK Rev - 3
Dis Bad Paw Label OK	Conc OK	Conc OK crushed edge	Conc OK
OK OK	Conc OK Rev - 3	Conc OK	Conc OK
OK OK Rev - 3 Rev - 3	Dis OK VENEER Rev - 3	OK OK Rev - 3	Conc OK V. crk.
Conc OK	OK OK	Conc OK crushed edge	OK OK
OK OK	Conc OK	OK OK	Conc OK V. crk. Rev - 3
OK OK Rev - 3 Rev - 3	Conc OK Po on Label Rev - 3	OK OK Rev - 3	OK OK Rev - 3
OK OK Rev - 3 Rev - 3	OK OK	Conc OK Po on Label	OK OK
Dis OK	Conc OK	Conc OK V. crk.	OK OK Rev - 3 Rev - 3
OK OK	Conc OK Rev - 3	OK OK	OK OK
OK OK Rev - 3	OK OK Rev - 3 Rev - 3	Dis OK	
	Dis OK VENEER crk.		
83 %	83 %	91 %	100 %

1149 E

Hoffman Make a little jag of varnish — Regular transfer varnish — no lamplight viscosity. 1/2 a minute 4 Rounds

5000 — Prints. 5-31-16

Rejects to Baldwin

Veneer	640
Edges	130
Rough Spots	104
Snaps.	121
Cracked	63
Low Spots	4
Wrong Comb'n	25
Scratches	6
Chipped	3

Nature of Trouble

More even blank so it will not squirt out so much & Crush blank well more than 1/2 the demands

Reasons why Holes are Crooked in Blanks

1st.

If hole in mould holder plates are not tapped straight

2nd

If the hole in the bushing is not straight with the hole

3rd

Mould holder lock pins shift moulds -

4th

Platens on press do not come up square

5th

Wedge shaped blanks

Cane / Pierro Rodar - 8/ 65	Jane / Piero.						
OK OK							
OK OK Pom - 3							
OK OK							
Pom OK							
OK OK							
Pom Pomlab OK							
OK OK Pom 3							
Mr. Barbolan OK							
OK OK							
OK OK							
Mr. Pomplitz OK							
OK OK							
83 %.							

1150 E

Press 42 Load 17

OK OK

OK OK — Venus

OK OK — V

OK OK — V

OK OK — V

OK OK — V

OK OK

OK OK

OK OK — Low — 3

OK OK

OK OK

OK OK

100%

Press 41 Load 11

OK OK

OK OK

OK OK — V

OK OK — V

OK OK

OK OK

OK OK

OK OK

Com OK — Venus

OK OK

OK OK

OK OK

100%

1150 E

2 Rounds varnished on Otto Mac by hand Table Turning at Constant speed, Revolutions 114 per min

One Coat regular way 2 hour Bake

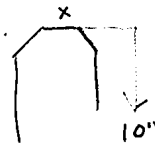
Print Req

This looks good probably more certain than turning by hand

Note -

An edged or rather bevelled

Overlay in Printing at X.



10" Second $\frac{1}{32}$ - To

$10\frac{1}{32}$ $10\frac{3}{16}$ $10\,3/64$ $10\frac{1}{32}$ $10\,3/64$

$10\frac{1}{64}$ $10\frac{1}{32}$ $10\,3/64$ $10\,3/64$ $10\,3/64$

Fred Otto - Experiment

B = Benzol with 3% beeswax by weight rubbed on Margin of Monigo - Not wiped off - put on up to feed line -

B -

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

C = Benzol + Castor Oil
3% C Oil -

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

The drummond shows grooves on smooth part near + to feed lines - will run wear test -

First time was surface on smooth rather hard - 2nd time much better 4th time surface very soft + good -

Low 3rd position

Later Adopted this + it at first went good then finally it didn't do any good at all or very little -

100% + perfect extra -

100% perfect,

1151 E Load 11 - Press 42

OK OK

OK OK — V

OK OK Low — Positive

OK OK

OK OK

OK OK Lower

OK OK Low — 3

OK OK

OK OK

OK OK

OK OK

OK OK — ck

100%

1151 E

Soft spot blanks — spots that show up in tumbling very matte which on cutting with knife are shown to be very soft compared to good part.

This is strange

1152 Prem 38 Load 17 Lot 75	June 1 Prem 39 Load 5 Lot 75	June 1 Prem 35 Load 11 Lot 75	June 1 Prem 58 Load 8 Lot 75
OK OK	OK OK	OK OK	Com OK — Crushed Edge
OK OK	Com OK — V	OK OK Sev - 3	Com OK — Slip Edge
Com OK Edge	Dis OK — VENEER	OK OK	Com OK — VENEER
OK OK	OK OK	OK OK Sev - 3 Sev - 2	Com Com — VENEER CK
OK OK	Com OK — VENEER	OK OK Sev - 1-½	OK OK
Veneer OK	OK OK	OK OK Sev - 3	Dis P.O. ruled lines OK
OK OK	OK OK	OK OK	
OK OK CK	OK OK Sev - 3	Com OK — CK	Com OK — VENEER
OK OK	Com OK — VENEER	OK OK	OK OK
Com OK Edge	OK OK	OK OK Sev - 3	Dis OK — VENEER CK
Com OK SK	OK OK	Com OK — CK	Com OK — VENEER
Com OK	Com OK — CK	OK OK	OK OK
			Com OK — Crushed Edge
91%	91%	100%	83%

1152

NOTE

4 Rounds —

Edges of moulds rubbed with the Vaseline solution of Castor Oil 3% — but only to within ¼ of each of music Fred will finish the job —

Prem Req 1522B

schedule

Note $\frac{1}{16}$" of Solution not Enough

$\frac{91}{83}$ 100 4 | 367 91.5

91.5 Average

1153

4 Rounds $\frac{1}{8}$ felt pad used to put Otto "C" solution on Edges of Mould

Lot 76 42-Load 6 1154E	Lot 75 Press 30 Load 8	Lot 75 P 41 Load 10	P 40 Load 17 Lot 75
OK OK	OK OK — V	OK OK	OK OK — V + Edge
OK OK	OK OK	Com OK — V	Com OK — Edge + Vin
OK OK	OK OK	OK OK	Com OK — V
OK OK	Com OK — V	OK OK	OK OK — V
OK OK	OK OK	OK OK	OK OK — V
OK OK — P.O.V only one	OK OK	OK OK	OK OK — Oil holes margin Too much oil
Com OK — Edge	OK OK — CK	Com OK — V	Com OK — Edge + Vin
Label ok	OK OK — oil near Label.	Com OK — V	Com OK — E + Vin — Edge
OK OK	OK OK	OK OK	Veneer ok — DIS
Com OK — V	OK OK	OK OK — Drop C sol music. wall pa - ok	OK OK
Com OK — V	OK OK	OK OK	OK OK
Com OK	OK OK	OK OK	OK OK — CKd
91%	100	100%	91%

1154E

378 — 2
756 —

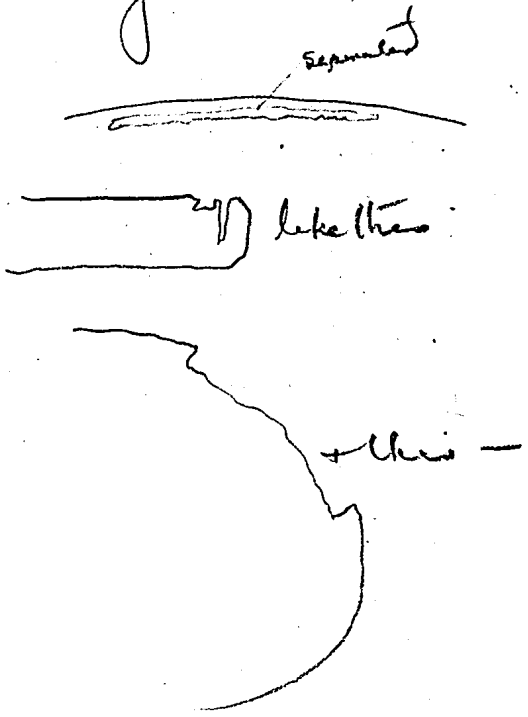
4 Rounds — 3/16 felt pad used to put OTTo "C" solution around Edge of Mounds

C813

Moulds as they are (now) are

1155 better than (padded slight) moulds —

Padded Moulds makes things worse



1155 E

X is padded Moulds —

Records from padded Moulds —

X	Edges This Moulded		
X	OK OK		
X	OK OK		
X	OK OK		
X	Com Com	Edges bad	
X	Com "	Edges bad	
X	Com "	Edge bad	
X	OK OK	Row 3	

Rotten

Press 41 L6 1156 E	38 Press Load 11	40 Load 4	37 Load 24	36 - Load 2
OK	OK	Com ok Edge + V	OK	OK
OK	Com ok Edge	OK	Com ok V	Veneer ok DIS
Com ok Bond Edge	OK	OK	Com ok Bond	both Edge DIS
OK	Com ok Edge	OK	OK	Com ok Veneer + Edge
Com ok Edge	OK	OK	OK	Edge DIS
Com ok Edge	OK	OK	OK	OK V
OK	OK	OK	Com ok Ven	OK
OK	OK Ven	OK	OK	Com ok Edge bad
Com ok Bond Edge	OK	Edge ok	OK	Com ok Edge bad
Veneer ok Edge	OK	OK	OK	OK
OK	Edge bad	Com ok Veneer + V Edge	Com ok Edge	OK
OK	Com ok Ven	Com ok V	Com ok Edge	Com ok V
	OK	Com ok Edge	OK	OK
91%	91%	91%	100%	75%

1156 E

1156 E

Hoffman

Make a bunch of pocoder + dont go above 150 deg Fahr in Vacuum hold there ½ hour not yet dump + take out + make 8 Rounds of blanks to run req Hum frequency on this number if OK & will let you know

31 Load 8	Load 13 P 39
Veneer ok DIS	Veneer ok DIS
OK	Veneer ok DIS
Veneer ok DIS	OK
Com ok V	Com ok V
Potential DIS	Com ok V
OK	OK
Com ok Veneer E	OK
Veneer ok DIS	OK
Com ok V	OK
Veneer ok DIS	OK
OK	Com ok V20
Com ok V	OK Core Ven
	Com ok V + Edge
58%	83%

Blank Schedule Reg 15223

Reg Shedule on 1522B Blank

Bring to Contact 100 lbs -
Hold 5 minutes - 100 lbs
Steam —
Then run to 600 lbs. Hold
for 3 minutes Cool -

Press

1157 2nd Round | Press 29 Load 8

Blank Cracked

OK OK

OK OK

OK OK - Latex PO

OK OK

OK OK

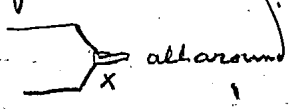
OK OK

OK OK

OK OK

Broken Blank.

Peculiarity of this
blank is that Edges
Squeeze out thus



1157E

Hoffman 2 Rounds
blanks -
Bring to Contact, put on
Steam hold for 2 minutes
then put on 600 lbs pressure
for ~~2~~ 1 minute - Cool

1157 Press 40 load 12

Veneer Dis
ok
Veneer Dis
bad

OK OK

Comm OK Veneer

OK OK

OK OK

OK OK

OK OK

OK OK

PO OK feathers

OK OK

Comm OK Veneer

Veneer Dis -
ok

Veneer don't seem to go into blank & clinch well -

Note Surfaces
are very good
considering the soft
thick blank -

Ethyl Alcohol

Boiling Point Fahr

BP	Vac
52	29 mches
72.2	28 "
94	26 "
118	22.1 "
133.5	18.2 "
145	14.3
154	10.3
162.3	6.4
169	2.4
172	0

Water

BP Fahr	Vac
32	29.82
50	29.64
68.2	29 32
86	28.76
104	27.84
122	26.38
140	24.13
158	20.83
176	16 00
194	9.30
210	0

1158- 42-Loads

Com OK Edges, squashed bad - center most,

Veneer pulled to music - blank thin - Center of blank flowed to our Edge -

Com OK veneer Blank flowed to Edge at Center

Blank flowed badly to Edge, finished above

" " " " "

" " " " "

Com OK " " " " " Cracked,

" " " " " crushed Edge

Com OK " " " "

Com OK " " " "

" " " " Edge + Veneer PO

OK OK flowed to Edge

All these flowed up to bevel ring on moulds + into space between,
These are rag blanks, The question is Why did these blanks flow so much

1158 E

Hoffman Make 1522 B Blanks
2 Rounds
Bring to Contact ~~for 2 times~~
put steam on hold 2 minutes
then put on 600 LBS pressure
for 2 minutes, Cool -

~~Bad 8 spaces~~

OK OK flowed to Taper + between,

OK OK " " "

DIS " "

DIS Blank Cracked

OK OK flowed to taper on mould + in between,

OK OK Didnt flow between,

OK OK flowed 1/2 around into space bet moulds.

Com OK — flowed considerably

Com OK — Edge — didnt flow in + between,

Blank Cracked

OK — flowed between moulds

Dis - flowed bet moulds

1159
Loaded 13. Press 32

Acts same as
1158E
NG

1159E

Hoffman
Make 2 Rounds of 1522B
blanks – Schedule: Put on
steam and raise pressure at
once to 600 lbs for 2 minutes
Cool –

Print by regular 1522B
Schedule

1160 E

No – poor print all over, stuck to mandrel
not filled in end mandrel or point of label.
ok
Low spots 2 or 3
" " 2 or 3
Loose spots all over 1 2 or 3
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "

Edges filled
now flow

very

ok
"
"
"

No flow to Edges – nearly every one poor print all over but ~~most~~ all of the 3/8 smooth start ok –

It appears that 850 lbs at lower temp of 10 lbs is not enough to make a full print.

1160 E

Two rounds 1522B blanks
Use regular Schedule but
do not let the steam go above
10 pounds pressure – you can
probably do this by manipulating
the Valve & watching it closely

2nd Round of 1161 - Man made a Dup

OK OK Edge not flowed

Dis-Veneer OK — bad surface probably Penchowed Veu - Not flowed

OK OK flowed slightly -

Blank Cracked in 3/8

OK OK flowed slightly — X

Com OK Edge

Blank Cracked - flowed,

OK OK flowed some at X

Veneer Dis blank flowed bad + part into space between Mould

Dis Veu - blanked flowed, at X much

Blank Cracked 1/4 in -

Veneer Dis - blank flowed bad + in between Mould

Note Cracked blank in these Experiments -

1161 E Blanks

Bevelled from feed line 8@.009 both sides

Print one Round of this

Reg Schedule -
Press 39

1161 -

Com OK — Very little change to Edges

OK OK - no change of Edges or slight -

OK OK " " "

OK OK slight change Edge

OK OK no change of Edge -

Dis - Veneer — Edge very little flow

OK OK - no flow to Edge

Blank Cracked

Com OK — Edge not flowed

OK OK no flow of Edges

OK OK no flow "

OK OK no flow of "

All filled Edge + all

83 a/o

1162 -

OK OK — perfect Edges

OK OK — no edge flow

OK OK — Some flow little -

OK OK — " "

OK OK — " "

OK OK — no flow

OK OK — This blank squirted ~~bad edges~~ & not undiluted like most of them showing there is certainly a difference in the blanks

OK Elbow — × — otherwise Edge undiluted no flow even at × must have stuck

OK OK — nearly perfect Edge

DIS — blank squirted out bad all around note Ulcal Varnish way over Edges

OK OK — perfect Edges -

OK OK — perfect "

Come OK — venus Po — Edges swelled not perfect

OK OK — Edges swelled some - fine long Tubular Venus long Crack

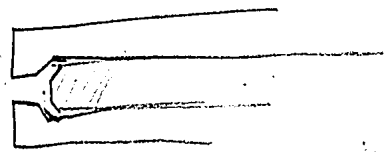
OK OK — Edges nearly perfect, too much wide

OK OK — " "

OK OK — Very fine Po — chipped 1/2 way around

1162E

One mould 2 Tunes with Edges backed off 005, ok (ask Clancy) so it punches blank last



The 1st record that was printed Came out perfect no swell at Edge at all, just as originally bevelled

The surfaces are extremely fine soft velvet,

Were these 2 Tunes discarded - If so they were discarded because they judged by Unwashed blanks - Piano has 1 snap

The only Explanation is that the main area of record presses down 015" + then a little further + fills the outer edge without swelling blank

This is mechanically Very Perfect,

NOTE

1163E NOTE

The bevel starts from Mensic feed line + tapers gradually + Evenly to the Edge 007 to 0075

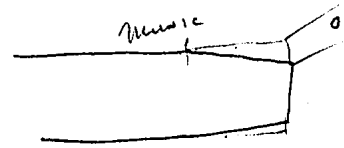
The two sides making 14 to 015" less Caliper than the main blank

It is astonishing that the outer rim of the record is fully pressed + Veneer firmly clinched, The

X Edge X being flat except 1 very slightly rounded

1163E

One round Blanks 0075" scraped



1163 Load N Press 41

OK OK
OK OK
OK OK
OK OK
OK OK Low 3
OK OK Edges swelled just a little
OK OK
OK OK
OK OK
OK OK
OK OK Low 2nd
OK OK

Outer edge perfect + filled

100%

Caliper of blanks 220 to 235 40 + as high as 250 —

Whole Records Calliper 215½ 205 to 235 —

Showing 015 margin — to fill the taper providing Schedule on Blank presses are to keep constant product —

(101)

1164-E

Load 6
Press 36.

OK OK	OK OK
OK OK	OK OK
Com OK	OK OK
Com OK Edge	Dis Edges
Com OK	Com OK Edge
Com OK	Com OK
Com OK Edge	OK OK
Com OK	OK OK
Oil Dis	OK OK
Com OK	OK OK
Com OK	Com OK Edge broken
Com OK Edge	OK OK Loose
Very OK	OK OK

83 1/2 91

Deduct lead

1164 E

Hoffman

Make blanks 1522 B

Req with req schedule

Except hold at 600 lbs

for 8 minutes 100 lbs clamp

We have set the Pacific blank presses at 600 lbs at the accumulator & no more can get on

Also Print presses at 850 no more can get on.—
this Eliminates the judgement of the Press Operator —

850 lbs is different for cellulose they want to stay on the 850 line so we lined presses at 850 line & found cellulose is ok & averages well on Condensate so from 4th adopted it & allow on 850 Press Line—

Notes — 3rd June 1916 —

Shortened time under 600 lbs pressure in blank presses make a thicker blank. $\frac{1}{32}$ This blank when permitted flows very much going up against bevels on rings of moulds & the center of the blank flows into the space between the moulds No veneer will stand this hence low OK percent.

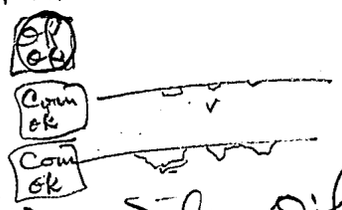
In Printing if the schedule is regular 850 lb 12 min at 120 lbs steam the print fills always — BUT if same schedule is used but steam kept at 10 lbs pressure by valve, every one is a poor print it dont fill — The 3/8 slant however fills — & seems generally good & if there was a fill it would give 100%

This shows the blank dont soften enough at 10 lbs steam temp to fill —

Round Oil pads instead of square

1 Veneer Discard –

1 Oil – DISCARD for oil wide round



1 Discard for Oil –

1 Discard Veneer

66% Round Pad NG

Fred Otto Beeswax - Square

Chamois Stick — 3 s/s Beeswax in Kegs

B3 Prev 140 load 1

PO on feed line - OK

OK OK

OK OK low 1

OK OK

OK OK PO on label

OK OK very fine

Com OK Edges — flow much

OK OK

OK OK PO feed line o.k. but fan from music

Com OK — CK

OK OK

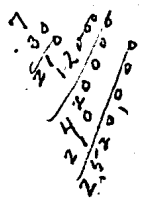
OK OK

91 s/s

NOTE ~~April~~ June 6/1911

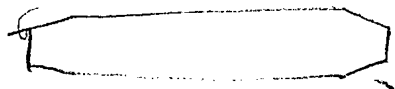
3% Beeswax in Benzol is standard now for Edges until further notice

HH 11



1165 E

Blanks made in hollow bottom & Top mould to produce a Taper blank at Edges



Hoffman to make round after round till it prevented out

Load 24 Press 41

OK OK noflow	OK OK ok noflow
OK OK "	OK OK noflow
OK OK "	OK OK noflow.
OK OK " Po rw lated. very small.	OK OK noflow
OK OK "	
OK OK "	
OK OK "	
OK OK "	

100% pass
83% perfect.=

Load 10 press 41 by mistake next Bevelled

OK OK ck'd V	OK OK c(d) V
OK OK	OK OK
OK OK ck'd V	
OK OK	
OK OK c(d) V	
OK OK c(d) V	
OK OK	
OK OK c(d)	
OK OK Edge	
OK OK c(d)	

100%

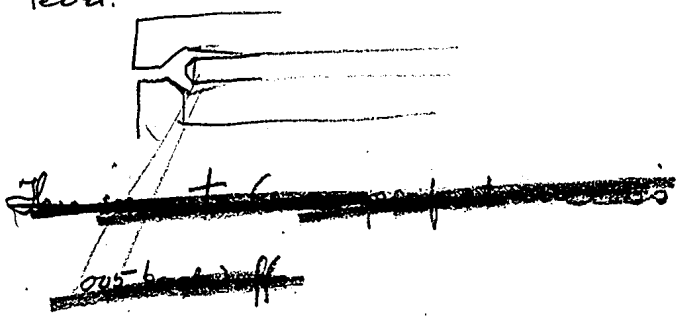
33% perfect

C(11)

		Lot 23 press 40	Lot 23 press 31
No Flow To Blank			
OK OK Edge flat	OK OK Edge Flat no flow	OK OK no flow	OK OK flow some 1st.
OK OK "	OK OK "	OK OK "	OK OK " allowed
OK OK "	OK OK "	OK OK " wyn Mech	OK OK no flow
OK OK "	OK OK "	OK OK	OK OK flow one time all around other not,
OK OK "	OK OK "	OK OK flowed some	
OK OK "	OK OK "	OK OK no flow	OK OK Bad Edging one side X
OK OK "	OK OK "	OK OK "	OK OK flowed some
OK OK shade round	OK OK one 2 edge flowed To angle	OK OK "	line of blacks apears on center of rim 1/2 way flowed
OK OK Edge flat	OK OK Edge flat no flow	OK OK " B	OK OK
OK OK "	OK OK "	8	8
OK OK "	OK OK "		
OK OK " Low 3	OK OK "		
100%	100%	100%	75%
Fine	"		
Best yet.			
Perfect 100	100%	100%	75%

1166 E.

Prints from new load of moulds turned off s.o. .005 on side only of level.



X note push off of Sheet due to bad Edging of angle —

B note — blacks apears

Blacks Spaces Either bad Vacuuming or dirt, or oil —

1167

Com OK — OK flowed to bevels -

OK OK ½ flow to bevels + bottom

OK OK Edges flat - no flow

OK OK flowed to bevels, not bottom flat

cracked — It was not filled V. looks thin ft. flowed a little on one side

OK OK mould scratched, Edge flat.

OK OK flowed some at this point

OK OK Edge flat - no flow

OK OK " "

OK OK " Not pressure enough on Edge at Edge -

OK OK flow 1/3 of Edge.

OK OK no flow

91%

015 Little too much with 200° Fahr -

OK OK no flow

Cracked — no flow, didnt fill at Edges

OK OK no flow

OK OK no flow

Some flow - silver Spots W.V.

OK Very Van at Edge, flowed bad

OK — didnt fill at Edge where cracks are

OK OK

OK OK some flow one Edge

OK OK no flow -

OK — flow where cracked

OK OK flowed some

OK OK no flow -

66%

All but one Edge filled. (where radial cracks) the fill was bad looked as if very much thin

1167E

15223

Beveled blanks — 007 @ 0075 outside — Total 015 —

Two rounds

Present Reg

NOTE

0075 is too much

0045 to 005 on moulds is about right

5th Round 1166.E Lot 23 Press 29	6th 23 - Press 26	23 - Press 29	23 - 35P
OK OK No flow	OK OK ½ some flow	smudge line OK near inside Flowed	OK OK flowed considerable
OK OK "	OK OK smear line near inside	OK OK no flow	OK OK no flow
OK OK "	OK OK No flow	OK OK very light smudge line No flow	OK OK "
OK OK ½ some flow	OK OK "	OK OK ½ some flow	OK OK Some flow
OK OK No flow	OK OK shade flow	OK OK slight smudge line some flow	OK OK No flow
OK OK no flow	OK OK ½ "	OK OK Slight flow	OK OK flowed some
OK OK ½ some flow	OK OK "	OK OK no flow	OK OK no flow
OK OK flowed to Angle	OK OK ½ to Temper	OK OK "	OK OK no flow
OK OK "	OK OK no flow	OK OK Poor edge	PO OK fine at feed line on outboard
OK OK "	OK OK 3/4 To Bevel	OK OK Light smudge line near feed line	OK OK Venees (big) Dis
10	10	10	10
100%	100%	90%	80%
Perfect 90%	91%	50%	80%

1166E Continued —

23 - 40 Press	Load 23 - 41 Pb Lot 102	23 Load 005 backed off
OK OK ½ flowed	OK OK smudge	
OK OK to angle	OK OK smudge	
OK OK ½ flow smudge line	OK OK no flow	
OK OK no flow	OK OK no flow	
Dis - flowed but not to bevel bad Edge + Vee both sides	OK OK no flow	
OK OK No flow	Blank Ckd	
OK OK flow to bevel + underneath	OK OK	
OK OK no flow saw edge +	OK OK ¼ flow	
OK OK flowed	DISCARD flow ½ flow ½ flow	
OK OK no flow	OK OK No flow	
OK OK flowed to Bev + underneath		
OK OK flowed ½		
91%	66%	
33%	16%	

1165 E Beveled Mould to give beveled BLANK
Continued Load 29 P 41
2nd Round

NF = No flow

OK OK no flow X	OK OK no flow CKD	OK OK Some flow 1/2 to Gauge CK	OK OK no flow CK	OK OK no flow X	OK OK NF CKD
OK OK no flow X	OK OK Some flow X	OK OK no flow X	OK OK no flow CKD	Pom music OK no flow	OK OK NF CK
OK OK no flow X	OK OK no flow X	OK OK no flow CK	OK OK no flow V	OK OK no F CKD	OK OK NF X
OK OK no flow X	OK OK no flow X	OK OK no flow V	OK OK no flow X	OK OK NF X	OK OK NF X
OK OK no flow X	OK OK " X	Corn Corn no flow Edge	OK OK " X	OK OK NF CK	OK OK NF X
OK OK slight flow X	OK OK " X	OK OK no flow CK	OK OK slight flow V	OK OK NF CK	OK OK NF V
OK OK no flow X	OK OK " X	OK OK no flow X	OK OK no flow CK	OK OK NF CK	OK OK NF Edge
OK OK no flow X	OK OK 1/3 flow X	OK OK no flow X	OK OK no flow CK	OK OK NF X	OK OK NF CK
OK OK large flow VEW	DISCARD CKD BLNK	Blank Cracked	OK OK no flow X	Edge Crushed OK	Venus OK NO F. V
OK OK no flow CKD	OK OK no flow - X	OK OK no flow X	OK OK " CK	Edge Crushed OK CKD Venus	OK OK NF Film Pol X
OK OK Bad Edge no flow CKD	OK OK " X	OK OK no flow	Corn OK CK	Corn " Crushed Edge Cod	OK OK NF V
OK OK Flowed CKD Bad Edge	OK OK " X	OK OK no flow X	Cracks OK DIS		OK OK NF CK
			OK OK no flow CK		
100%	91%	91%	91%	75	91%
Perfect 66%	83%	41%	25%	25%	33

Very close inspection

C121J

OK OK — CK	Discard PO Veneer big.	Blank Cracked
OK OK — V	Blank Crushed	Com OK — Edge
OK OK Veneer — DIS	Com OK — Edge Crushed	OK OK — PO CK
OK OK Blank Crushed	Blank Crushed.	Com Com — Edge
OK OK — X	Com OK — Edge	Com OK — CK
OK OK Com OK — CK Lack of adhesion	OK OK — CK	Discard Crushed Edge
OK OK Crushed blank	OK OK — CK	OK OK
OK OK " "	Blank Crushed	Com OK — CK
OK OK DIS — CK	OK OK — CK	Com OK — V
OK OK Crushed blank	Com OK — Edge	DIS Crushed Edge
OK OK Crushed blank	OK OK — V	OK OK — CK
OK OK Com OK — Edge	OK OK — CK	Cracked blank
41%	66	
8% perfect.	None perfect	

all Veneer

1168E

Varnished blanks which have been baked between high Tins on record racks —

8 Rounds

Evidently these racks will not do any Alcohol left in @ cans to be Bad — Must have go circulation around Each blank in Drying oven

Edging Tools Multiple Edger

Hours Run June 6th 1916

25.5
22.5
8.5
19.2
21.2
4.5
29.2
16.7
38.7
23.2
5.2
23.2
23.2

20 Hours & 4 minutes average

1169 E

OK OK 1/3 flow -

OK OK 1/5 flow ven

OK OK 1/4 flow ck

Corr OK 1/4 flow Maybe DIS

OK OK no flow ck

OK OK no flow ck

Dis Cracked

OK OK only flow in Center

OK OK no flow -

OK OK Center flowed ven

OK OK ven

OK OK no flow ck allowed

OK OK no flow - ck

OK OK flowed ck

OK OK no flow

OK OK some Center flow X

OK OK no flow ck

OK OK no flow X

OK OK " X

OK OK some flow 1/2 X

OK OK no flow ck

OK OK no flow X

OK OK no flow ck

OK OK center rounded flow ck

91%

perfect 16%

100%

41% perfect,

1169E

2 Rounds.

Note change in schedule

Bring to Contact needle just off pin - When Thermometer reaches 220 degrees; put on 850 lbs pressure for 12 Minutes.

Cool Cold

1170E 1st Round Load 17 P 24	Load 3 42 Pkg.	Debut Test new pacing and others		
Blank CK II	Blank CK II			
Edge Crushed	Veneer off 5			
Edge Crushed	Edge Crushed			
" Cracked	" "			
" Crushed	" "			
" Crushed	Coin " "			
" separated	Coin Veneer			
" Crushed	Crushed Edge			
" "	Coin " " "			
" "	" "			
" "	" "			
OK OK	" "			
	" "			
8%	25%			
Perfect none	perfect none			

1170E

Hoffman Made a bunch of Jacoder with 4-3-4 $\frac{8}{10}$ lbs Lac instead of 4-3-4 1 lbs

Want 500 blanks —

Print Reg schedule —

This looks as if defacing of Shellac is cause of Crushed Edges + defects at Edge generally. 8/10ths is not Enough wants 1 $\frac{1}{10}$ possibly 1 $\frac{2}{10}$

C1313

OK	Ckd Blank	Dis cracked V
Com OK	Edge	Com OK Edge
OK	X	OK
OK	V	OK
Com OK		X
Com OK Edge	Ckd Blank	OK
Dis Edge Vinear Crush	Edge Dis	
Dis. Edge Crush	OK	Ckd
OK X	OK	Ckd
OK	OK	Ckd
OK	OK	
OK X	Cracked Vein Dis	Ckd in place Edge
Dis OK	Cracked Edge	Dis Ckd
Dis OK	Com OK	Dis Ckd
		Dis Ckd
66% OK	58%	58%
Perfect 16%	8%	8%

Same - bad

1171 E Keeping Var blanks appears BAII

8 Rounds req 1522 B blanks Watmashed + Baked regular to be laid aside, 4 Rounds to be printed 36 hours after Baking + 4 Rounds after 72 hours.

OK	Edge	
Blank Crushed Dis Feed line	Vinear OK	
OK	Com OK Edge	
Vinear OK	OK	
OK	OK Vin	
Com OK Ckd	No OK feed lines	
Edge Crushed	OK	
Vinear Discard	OK	
" Discard	Vinear OK	
Vinear OK	OK	
Vinear OK Ckd	OK all around	
25% perfect none	Vinear Discard	
	Vinear Ckd 58% nonperf	

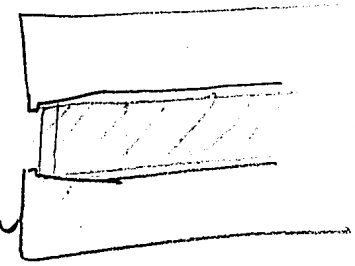
Redent test

Redent test

X perfect	1172 E	Blanks Not Edged	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	Veneer OK	CK Dis CK
OK OK	X	?	CKd Blank
OK OK low	3	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK		Cracked blank	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
		OK OK	X
100% perfect	83	75	75% perfect

1172 E

Hoffman

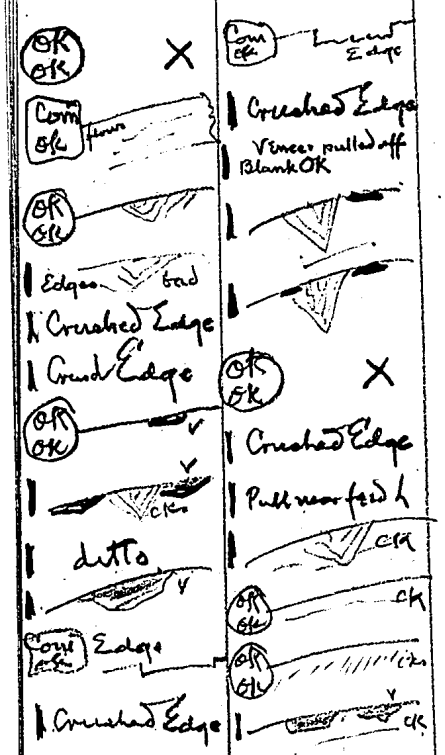


Make ~~2~~ 2 Rounds of blanks in The Knife Edge mould & tell Miller when ready

They swell a little generally 1/2 - + Extreme Edge 1/32 @ 1/64 Spalls off on some but places but Edge is OK up to Extreme edge of Varnish -

See further on for more rounds

1173 E



41%

8%

33%

8%

NOTE

Evidently a little more Stiffness dont Cure the Edge trouble

1173E

Hoffman –

Make another full batch like 1170 – But with 4 – 3 – + 1 or $\frac{2}{10}$th Lac instead of the Regular 1 Lac, ~~[illegible]~~

Make 4 rounds of blanks –

All are flowed round but do not go to or show the bevels –
The Center goes out Considerable but dont show space between Bevels tho Certainly plastic or yet Crushes

~~[illegible]~~ –

6-9-16 June 9 1916

Lot 1065 E Some of first 1522 Records
Edged cleaned & numbered —
Put up on time test over Case
in Music room
May 10 1916 -
Retested for surface
Apparently no Changes
in surface —

C14U

1174E 1st R		Pneu 32	
OK OK Cks	PO at feed line OK	Crushed Edge	
OK OK X	Edge Crushed	Veneer OK	
OK OK		Veneer OK Cks	
OK OK Cks		OK OK Cks	
OK OK Cks	Crushed Edge	Edge OK	
Ckd Blk	" "	Crushed Edge	
OK OK	" "	OK OK	Relief Level
Dis Edge -	OK OK	Crushed Edge	
OK OK	Crushed Edge	Com Left Edge	
Crushed Edge	OK OK	OK OK	
Pull out -	Dis	Crushed Edge	
OK OK		OK	
66 -	33%	33	
8%	none	none	

1174E

Hoffman

Make 4 Rounds of blanks 1522B from powder made with chaffee from 16 bbls + get even quality

5-10-16

After lot 157 all powder is dried at 150@160. 1 hour after reaching this in Vac Dryer -
also this is 8% lime chalk -

C145J

1172E

OK OK	X
Cracked Blk	
OK OK (Cks)	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
PO OK at fold in Music Bad Varnishing	
OK OK	X
OK OK	X
OK OK (Cks)	
OK OK	X

83%
66%

9 days after — 1172

OK OK	X
OK OK	X
OK OK	
OK OK	X
OK OK (Mout Sound)	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
Cracked Blank	

91%
75%

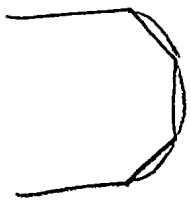
1172E Continued

Blank Ckd	
"	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK (Crks)	
OK OK (Bit Edge, hard Ck Out + found Crack in Blank)	
Blank Ckd	
"	
"	

58%

41 ~~Perfect~~

Only two out of 12 floated to the bevels to distinct, They were matte + round Edges + semi round



The trouble here is Crked Blanks probably dont get heat Enough at Edges —

Notwithstanding DIS based on Blank it falls significant to 3 levels + significant between in addition in Blank

Continued 1172E Not Beveled

OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X

100%
83% perfect.
Blanks not Edged

OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X

100%
100% perfect

Continued 1172E

CISU

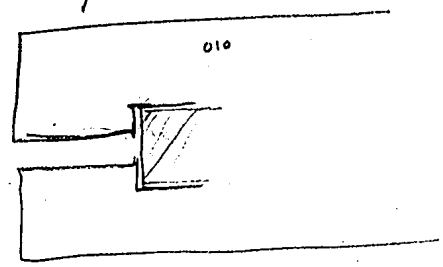
1175

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	OK
OK OK	X	Com OK	Blank bad Edge
Edge 45°			
OK OK		OK OK	
OK OK	X	OK OK	X
Edge 45°		OK OK	
OK OK			
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	11	
OK OK	X		
16			
87.5		100%	
75% perfect		54%	

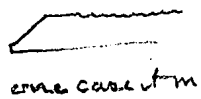
1175 E

Luhr to fix one part mould holders - without bevel

To be 10/1000 smaller than the blank



First one 6/13th 1916 - Came out perfect -

The cracked edge  seems to be due to bad edges, in one case it may be due to absence of lead pkg

5-10-16

Have just found out that our system of powder is wrong
We mix a new batch of powder
4-3-1 grind & screen
The stuff which dont go thru screen accumulates & is reground — Now this stuff is mostly fibre - to large, this gets ground up & its surfaces have very little shellac, The result is that if we start monday we get right proportions - perhaps
$3\frac{8}{10} - 4\frac{2}{10} + 1\frac{1}{4}$ tuesday —
$3\frac{7}{10}$ $4\frac{3}{10}$ | on wednesday
$3\frac{6}{10} - 4\frac{1}{2} + 9/10$ — —
& on thursday $3\frac{1}{2} - 4\frac{6}{10} + 8/10$
getting drier & drier
Chalk gets thru 1st, fibre last + fibre being ground finer + finer exposes more surface that has no shellac on

Note,

Have printed so far 3 prints one in a round using Varnished blank not baked just air dried only long enough so not sticky — Prints OK. Sounds OK, but blank Cracks just the same

Blanks must be too Dry wants more

Late — Later

1176E lot 163
P 39 L 13

OK OK ck	OK OK X Soft	Dis V-Edge	Dis
OK OK V		Edge	Dis V blank ck
OK OK V	OK OK	OK OK X	OK OK X
OK OK V	OK OK X	OK OK X	Com Edge+V
OK OK V	OK OK V	Edge V cks	OK OK V
OK OK Edge 4"		Com	Dis-
OK OK ck	OK OK Edge		OK OK ck
OK OK Edge 1"	Dis Veneer	OK OK X	OK OK ck
OK OK X	OK OK X	OK OK ck	Powder, V+bad Edge
Soft Burr V bell sides	Veneer-Blank bend	Edge + ck	" "
OK OK V	Com Edge	OK OK X	OK OK X
	Edge	Discard	Com OK ck
	OK OK X	OK OK ck down seam	
83	66	58	58
8%	33%	33%	16%

1176E — part that prints bowl in Very hard + ok opp where dent head bowl bad + Very soft.

Printed 4 Rounds - made of fresh powder no accumulation of scarcelled + screen ok

Regular NOTE

new powder no better than old powder we that too dry

Present Reg

always this crack where BAD + Cut off.

Cut + you find Cracks at this point

Some times Soft Hard

generally soft -

1177 Lot 14
Run 26

Blank Cracked

Crushed Edge

Veneer

Veneer

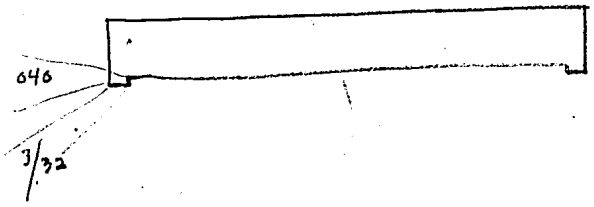
60%

more perfect

Cutout

1177 F

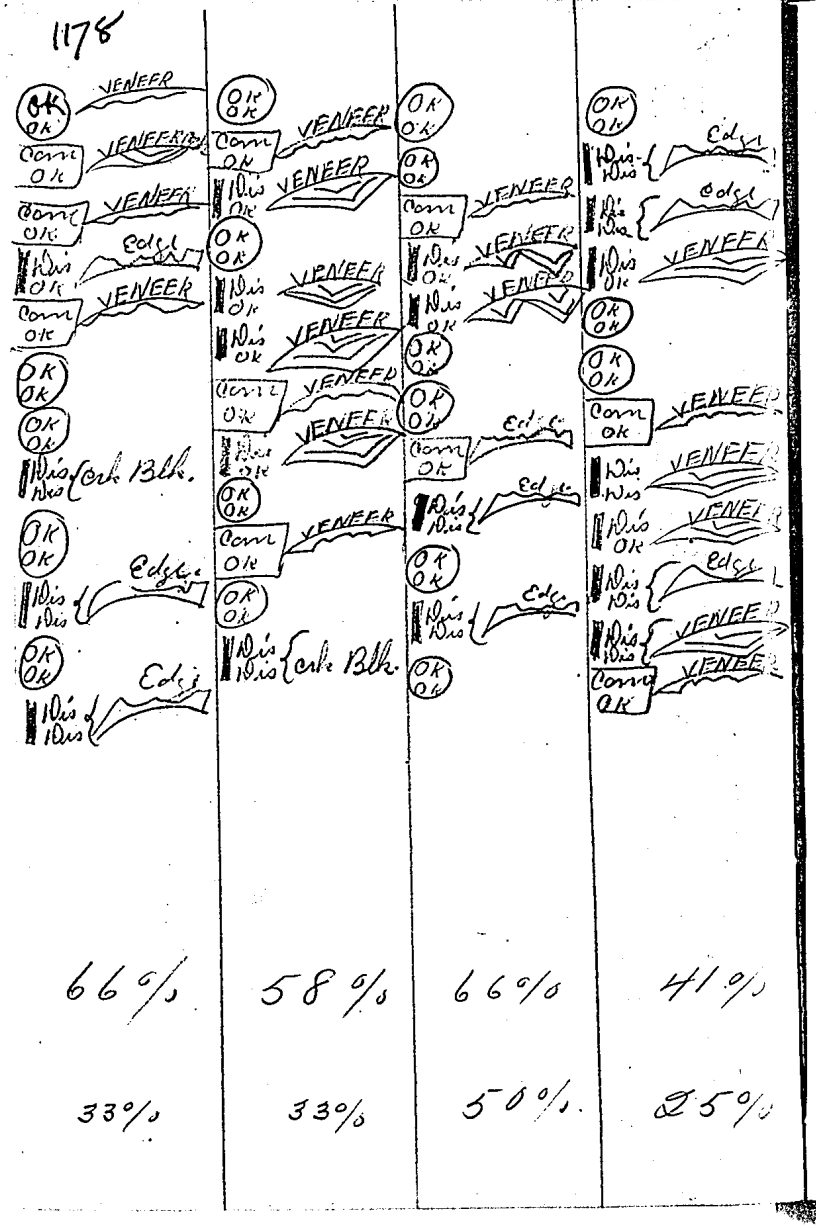
Blanks from new mould
ground by Luhr



2 Rounds

Thus ordinarily is NG

1178

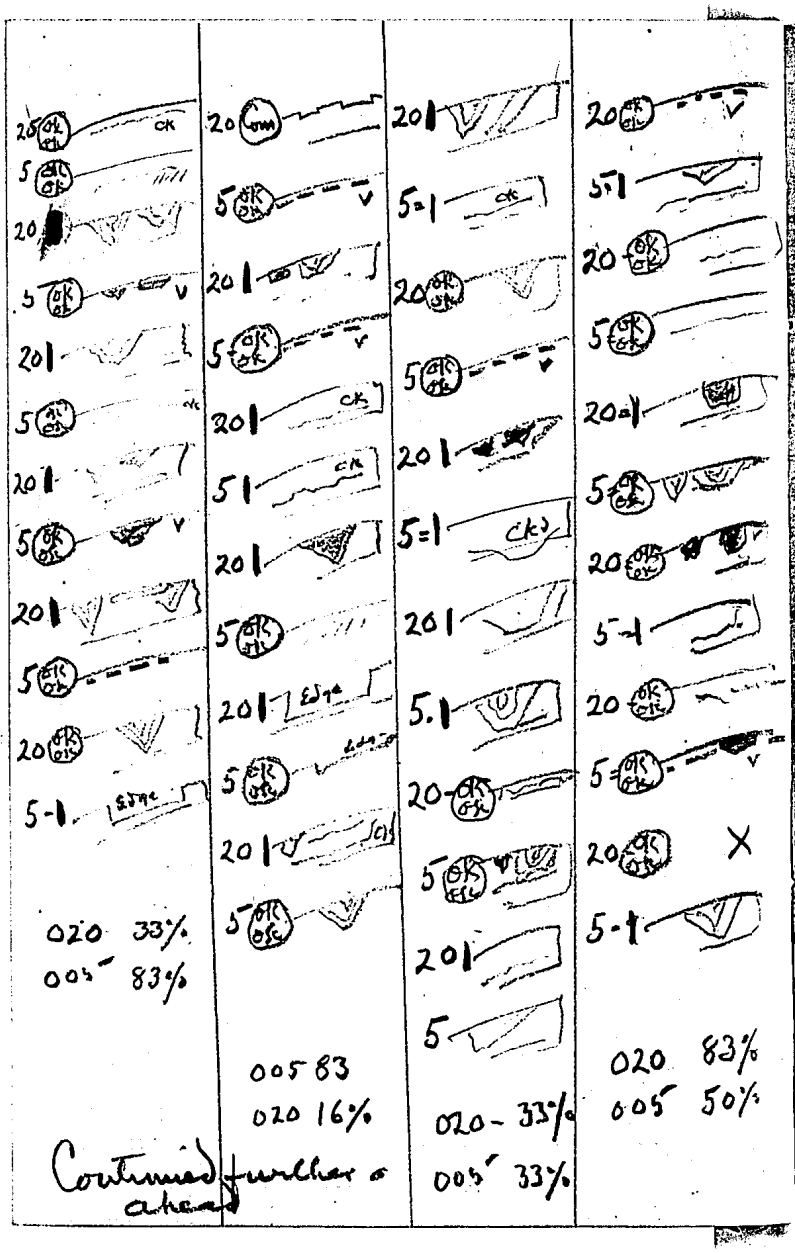


66%	58%	66%	41%
33%	33%	50%	25%

1178E

4 Rounds gauged within .010 of each

Print Reg



1179E 14 of 020 Bad
7 of 005 Bad

of all defects 020 23 defects
005 24 "
Apparently very little gain

48 Blanks - all varying .020 & over

and 48 blanks - within .005 ——

4 Rounds to be grinded One 005 then 020 then 005 — & so on so every alternate blank goes in a round

Lot 163

1180 -

Press 42 - load 28

OK OK ck	Com " Edge ck
OK OK ½ very rough	Com " Edge ck
OK OK ck	Com " Edge ck
OK OK X	Com " Edge
OK ck	Com " Edge ck
OK OK ck	Dis Edge
	6
Vemerick Dis Edge -	Dis Edge ✓
ck to Music ✓	
OK OK ck	OK OK ck
OK OK	OK OK ck
PO OK near feed	OK OK ck
OK OK ck all rounds	PO OK at feed
	OK OK ck
66	6
	75
8 of 8 perfect	no perfect

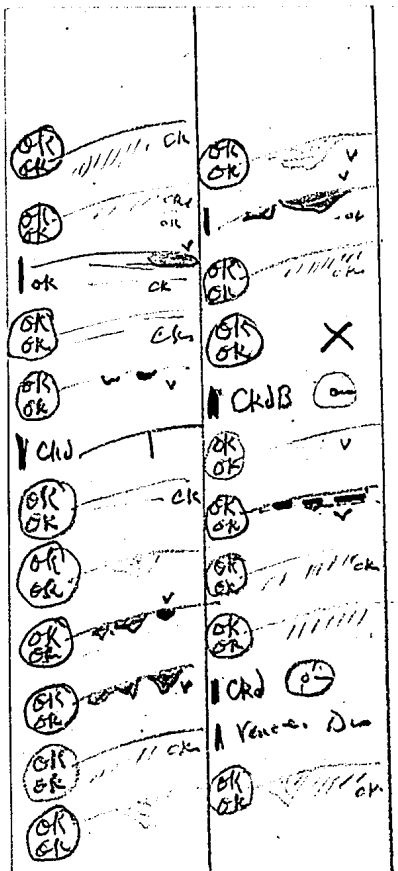
1180E

Print 6 Reg + 6 Dummies - That are solid - no blank inside -

6 Dummies solid metal on the bottom - Reg are at top

NOTE

This dont fix the bad Edges apparantly —



83%
none perfect

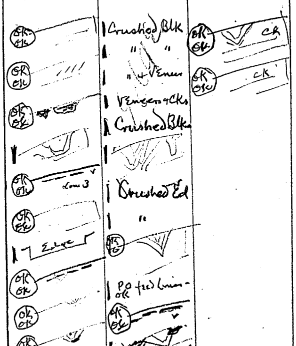
66%
8%

1181E

Hoffman -

Put an $\frac{1}{8}$ thick - 3/8 wide ring of Rubber
around outer rim of Rubber
So as to get more powder
& harder Edge,
Make 2 Rounds
& Print

1182 E



83%

16%

Press probably not heated right.

1182 E

2 Rounds

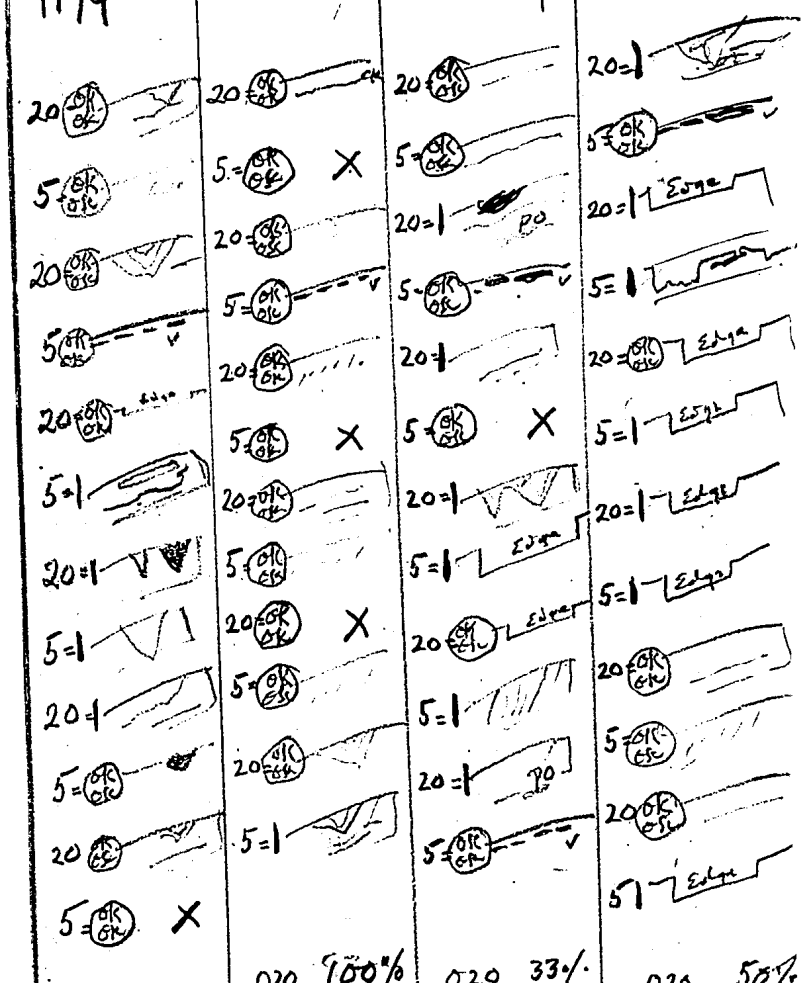
Blanks made with Extra ring to prevent big rubber plunger from flowing -

Print Reg

1 Round run -

011
8
4
8
6
8
8
6
7
8
7
.010

1179 Continued not Touching Bevels



1185

020 44 defects
005 43 defects -

020 18
005 9

Edge
020 7
005 7

Parallelles
005 8
020 15

020 7
005 6

020 - 1
005 10

Couch 020 25
" 005 30

Very little difference

About same as Regs
with 5%

1184 E

6-13-16

4 Rounds with Blanks
from new Carload of
Chalk
Paint Reg
It starts at 209 Lot
Sweepings 196 Lot,

C181

1185 E

1 Veneer Dis

1 " Dis

GR GK

1 Cracked blank

GR GK ×

GR GK

GR GK

GR GK Edge of Veneer

GR GK ×

1

GR GK ×

GR GK

66 2/3

16 2/3 perfect

1185 E

Hoffman Expt

Blanks, without Rubber

Pressures or Turn table

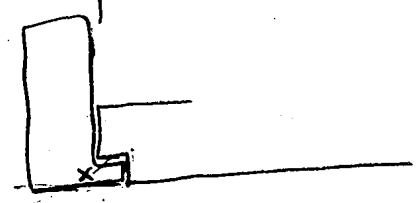
1186E

OK OK X	OK OK X	OK OK	OK OK X
OK OK Low 2	Cracked	OK OK	OK OK X
OK OK X	OK OK X	OK OK	OK OK Low 3
OK OK X	OK OK	OK OK	OK OK
OK OK X	OK OK Veneer	OK OK	OK OK X
OK OK X	OK OK	OK OK X	OK OK Low 2
Some OK VENEER	OK OK	OK OK	OK OK X
OK OK		OK OK Veneer	OK OK
OK OK X	OK OK	OK OK Low 3	OK OK Low 3
OK OK	OK OK	OK OK X	OK OK
OK OK X	OK OK	OK OK	OK OK
OK OK	OK OK X	OK OK	OK OK
	11		
100%	81%	100%	100%
58%	27%	16%	

1186_E

Hoffman

4 Rounds of blanks made with Clean moulds and bottom mould not touching ledge on outside ring



X not touching at X — + clean

Print Reg

1187-E

Hoffman

Make 2 or 3 blanks - Then, Bring to 600 LBs Cold, Then put on steam for 4 minutes

1 Top hard
bottom soft

2 2 MORE same but steam left on 6 min

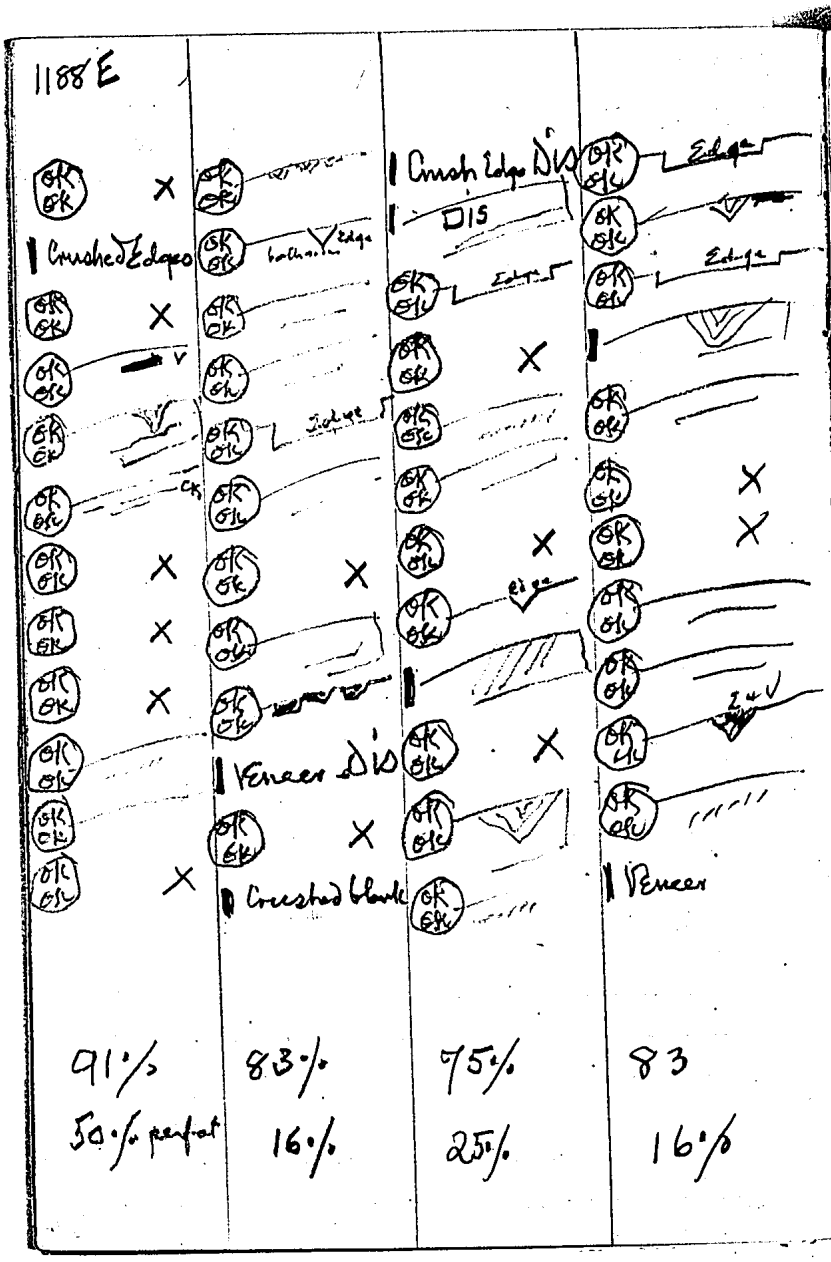
Top Hard
Bot soft

3 Dup the 4 min but dont use Rubber packer Hammer pieces

Top Hard
Bottom soft

These blanks are very much softer than 1 + 2

1188 E



91%	83%	75%	83
50% perfect	16%	25%	16%

1188 E

Hoffman

Make 4 Rounds Reg blanks but with clean Edges around bottom plate & bottom side of bottom plate cleaned of blank Material

Print Reg

There seems to be no improvement here but trouble is somewhere else, but this is good Teaching

(191)

Average Miller & Upstairs —

June 20 -	80.8 OK	43% Perfect
	84.8 OK	37.5 "
	89.5 OK	53
	83.7	51.4

June 1	1st	2nd	3rd
Leg 1	3015	2923	
2	1609	2188	
5	2265	2825	
6	2581	2591	

1508	5 — 2 — 1 1/3
1510	5 — 2 — 3/4
1522	4 — 3 — 1

average of Miller & Upshaw Inspector
60 Records —

	OK	Perfect
June 6	95	82
7	92	68.3
8	91	61.4
9	81.9	55.1
10	80.3	43.8
12	86	54
13	76.1	47.0
14	83	50.6
15	85.5	51.6

Final % To Baldwin -

May 28	75%
June 4	80.9
5	85.3
6	80.4
7	78.25
8	70.34
9	55.7
12	66.6%
13	51.5%
14	47.5
15	50.0

Output blanks - 1522 B

May 23	4780	
24	5003	
25	5223	
27	4223	
29	7685	
June 1	9470	
2	10527	
3	7218	Shortmen
5	8247	
6	9756	
7	11437	
8	12869	
9	14127	
10	8697	
12	12000	
13	12150	
14	11351	
19	9662	

See over

May 25	Total PB Moulds on hand	309
27		339
29		372
June 1		421
" 2		444
" 6		457
7		470
8		502
9		502
10		502
12		521
		521
		521

1522 B Records Received by Baldwin

June	1	2192	10th	4513
	2	1694	12	7065
	3	1268	13	7655
	5	5127	14	7215
	6	5237	15	5917
	7	6056	16	7132
	8	5504	19	6020
	9	7091	22	6247

Mould holders received Rec.

June	6	16	Holders received
	7	15	"
	9	21	"
	10	21	"
	12	20	"
	13	32	

[ITEM(S) FOUND IN BOOK]

6/27/1[illegible]

Dis. Road [illegible] in Muncie
" " P.O. [illegible]
" " P.O. [illegible]
" " " " " "
" " " " " "
" " Bad Venus
" " P.O. and Chico
" " " " in Muncie

[illegible] Duncan [illegible]
Roundtrip [illegible]

4.80
15
10
240
480
72

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 16
Notebook, N-16-06-14

This notebook was used by Edison during June-July 1916 for notes on experiments to improve the surface quality and the durability of disc records. There are also notes by Archie D. Hoffman and other experimenters, probably including Sherwood T. (Sam) Moore. The entries pertain primarily to experiments 1189E through1238E. Included are tests involving different presses and varnish compounds, variations in the methods of applying the varnish, and differing amounts of pressure and baking schedules. Also included are tests with a new "square edge" or "square ring" mold. Additional entries relate to diamond reproducer points and the amount of labor required in varnishing. At the end of the book are notes on the number of "girls" employed in the manufacture of records, as well as notes about piece work rates, inspection standards, the number of records produced, and the results of "drop tests." Some notes are in the form of instructions to Hoffman. Inserted into the book is one loose note by Edison regarding the reexamination of experiment 1143 in November 1916. The front and back covers are labeled "16." The pages are unnumbered. Approximately 140 pages have been used.

Schedule Blank process

5 mm Contact
3. " 600 C.G.
8 " Cool
16

16) 600 (37
48.0
122
112
37

21

S6769
Acme Co.,
MFG. STATIONERS,
96 JOHN ST.
AND
19 PLATT ST.
NEW YORK.

20) 600 (30

Started
June 14 1916

12	100%
11	91
10	83
9	75
8	66
7	58
6	50
5	41
4	33
3	25
2	16
1	8

21
12
42
210
35

OK
OK

OK
EQ

1 cked

OK
EQ

1 Cracked blank

OK
EQ

OK
OK

X

OK
OK

X

OK
OK

1 Pinch

OK
OK

X

1

OK
OK

75

25%

1189E

One round - blank plungers
both move

Print Req

1190 E

OK	X
OK	X
OK	X
OK	X
OK	X
OK	X
OK	X
OK	X
OK (Blanks 1 to 6 ok)	✓
OK	X
OK	X
OK	X

100%

91% perfect,

1190 E

Lot 228, Norway pulp,

One round of latest made blanks - not edged, Varnished on both sides & Edge all over, Print in the new Mould holders using square edge blanks

Load 3,

Print Req

Load 3

1 Crushed Edge Good
1 Crushed Edge
1 Crushed Edge
1 Crushed Edge
1 Crushed Edge
1 Crushed Edge
1 Crushed Edge
OR etc
OR etc
1 Crushed Edge
1 Cracked flank
OR etc

1191 E

One round of blanks ~~[illegible]~~ made in single press

Print Reg.

Pull out feed line,

P.O.

OK OK Low 3

OK OK

OK OK Low 3

OK

OK OK

OK OK

OK OK Low 3

OK OK Crushed Low 3

OK OK Low 3

OK OK

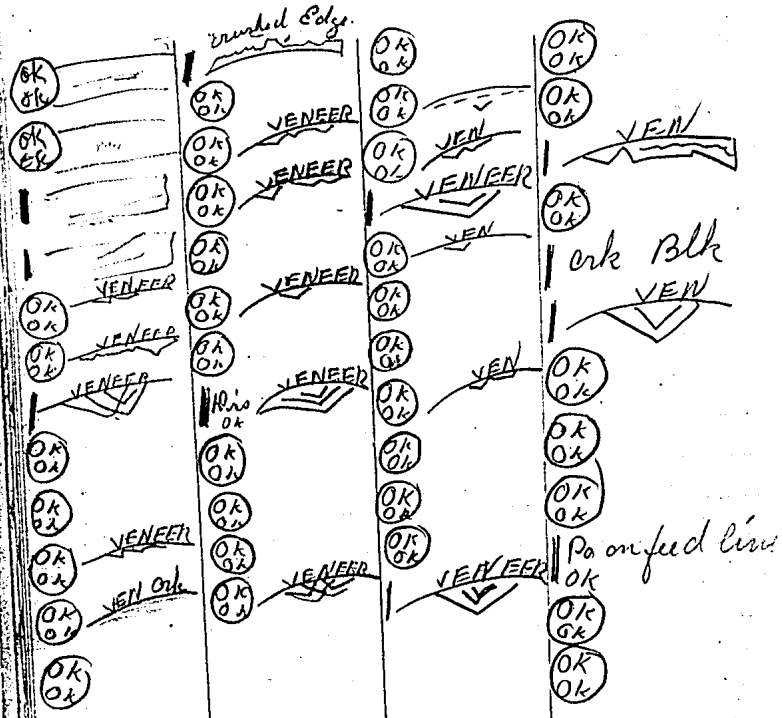
75 -
none perfect

1192 E

One round blanks made
+ also punched in
single pieces

Note the low

1193 E



75%	83%	83%	66%
25%	50%	50%	66%

1193 E

4 Rounds

Req schedul but put on final pressure of 850 lbs slowly Take One minute to 1½ to go to 850 lbs.

Test to see if slow putting on will stop lead Edges

New Square ring Mould.

OK OK	X	OK OK	
OK OK	X		
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X		
OK OK		OK OK	X
OK OK		OK OK	
OK OK	X	OK OK	X
OK OK	Edge veneer	OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
100%		91%	
76.9 perfect.		58%	

Night New Square blank + mould

OK OK X	OK OK X
OK OK V	OK OK X
OK OK	OK OK X
OK OK	OK OK X
OK OK V Edge Edge Bad blank	OK OK X
OK OK X	OK OK X
OK OK X	OK OK X
OK OK V	OK OK X
OK OK	OK OK X
OK OK ck ck	OK OK X
OK OK X	OK OK X
OK OK X	OK OK X
OK OK X	OK OK X

100%
50%

100%
100% perfect

Night New Moulds

OK OK		X	
OK OK		X	
OK OK	loco	1 z + 3	
OK OK		X	
OK OK		X	
OK OK		X	
OK OK			
OK OK	Edge Bad Edge & Crack		
OK OK	Edge		
OK OK			

83% 41%

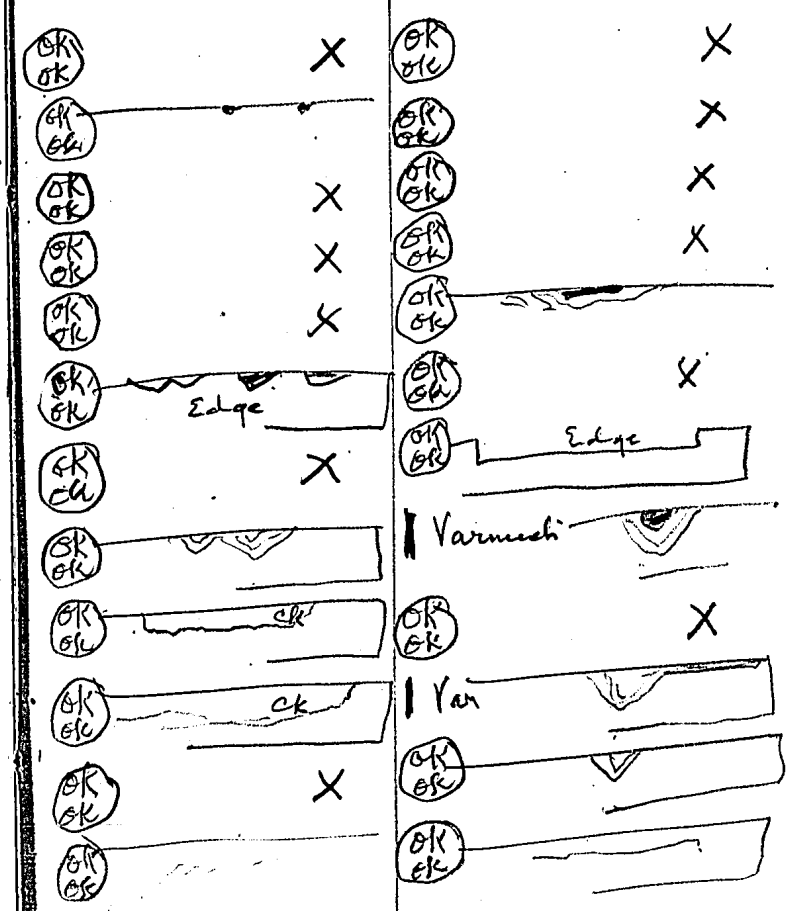
	Both Sides
OK OK	
OK OK	X
OK OK	
OK OK	Edge
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X

91%
66% perfect

Night - New Mouled

OK OK	V	OK OK	
OK OK	Edge, V	OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK		OK OK	Edge
OK OK		OK OK	X
		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
91%		100%	
58%		83%	

Daywork New Moulds



100%
50%

83%
50%

Reg run of blanks beveled Edges
printed Reg 11 Records
Sweepings
79.2 OK 54.7 % Perfect,

Reg Powder new Carload
Chalk low lima
95.1 OK 64.5 % perfect

Day New Moulds —

		This round has no lead Gasket	
OK	X	OK	X
OK		OK	X
OK	X	OK	X
OK		OK	X
OK		OK	X
OK	X	OK	X
		OK	X
OK		OK	X
OK		OK	X
OK		OK	X
OK		OK	X
OK	X	OK	X
OK	X		
		100%	
83 — 41%		100% perfect.	

New Moulds
Without Lead Gasket

OK	X
OK	
OK	X
OK	X
OK	X
OK	X
OK	X
OK	X
OK	X
OK	X
OK	X
OK	X

OK	X
OK	X
OK	
OK	X
OK	
OK	X
OK	X
OK	X
OK	Soft spot in blank
OK	X
OK	(b) (Ck) from hole
OK	X

91% OK
91% perfect.

83%
66%

New Mouldo
without Lead Gasket,

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	CK
OK OK	X	OK OK	X
OK OK	X	Beeswax offed line;	
OK OK	X	OK OK	X
OK OK	X		
OK OK	X		
OK OK	X		
OK OK	X		
CKd Soft Spot at Edge			
OK OK	X		

6.

91% OK
91% perfect.

New moulds — Small press no rubber preserving or use of turn table —

1185 not Gevelled - Varnished on edges

Veneer pulled off.

		Rag blanks — Lead in —
OK OK		X
OK OK		Edge
		OK OK
OK OK		X
OK OK	Edge	X
OK OK		X
OK OK		X
OK OK		X
OK OK		X
OK OK		X
OK OK		Edge
OK OK		

Above have lead gasket.

These without lead gaskets.	
OK OK	X
OK OK	X
OK OK	X

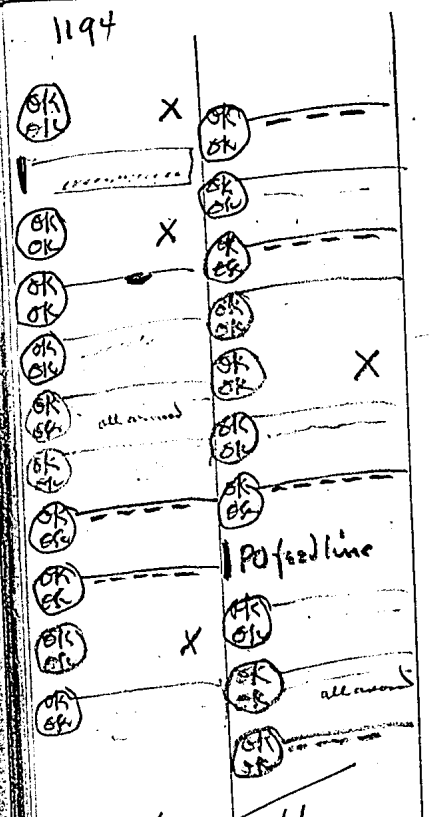
83

25%

100%

57%

1194



91%

25%

90%

8%

1194 E

4 Rounds with regular mould, but with the $1\frac{1}{2}$" of Asbestos sheets in press

Right Wrb	Square Board #	Ring Reg 3	Mould Right Wrb
Ok Ok	X	Ok Ok	Edge
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	VENEER Crb
Ok Ok	X	Ok Ok	X
Dis Ok	VENEER	Ok Ok	VENEER
Ok Ok	Edge	Ok Ok	X
Ok Ok	VENEER	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Dis Ok	VENEER
Ok Ok	X	Ok Ok	Crb VENEER
Ok Ok	X	Ok Ok	VENEER
	91 %		91 %
	75 %.		50 %

New Moulds
without Lead Gasket

OK X

OK X

OK CK

OK Edge

OK X

OK

OK X

Crushed Edge

Crushed square $\frac{1}{8}$

Soft blank

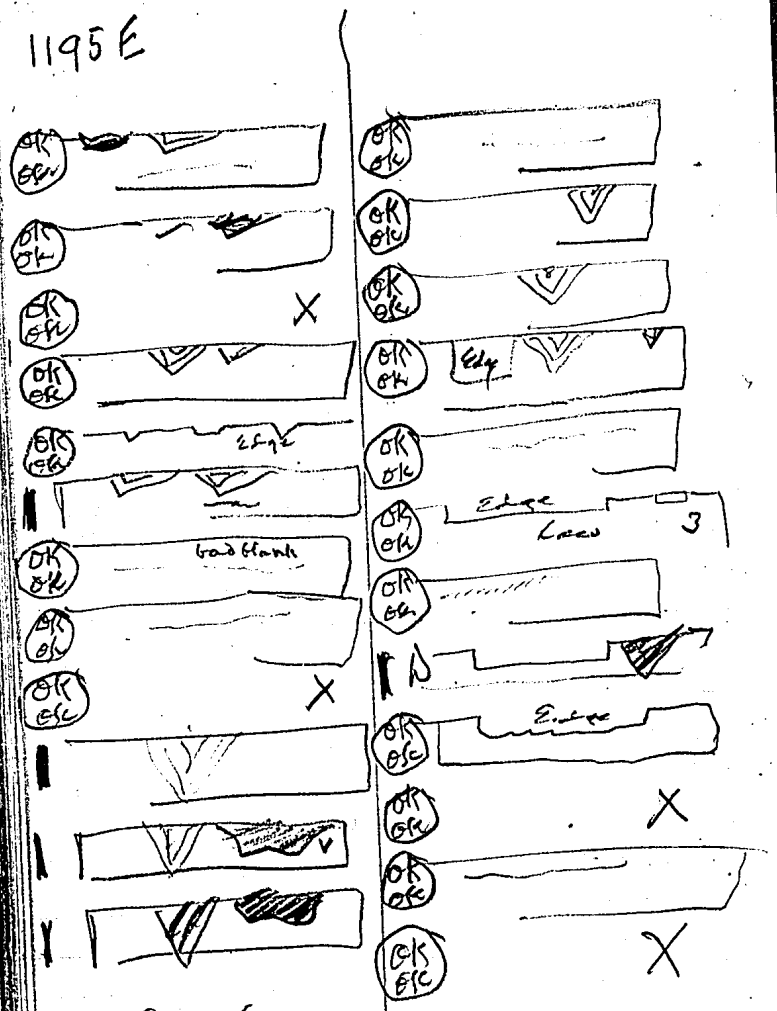
OK

OK X

75%

41%

1195E



1195E 7

Print two rounds load No 3 with square edge moulds Change Schedule from 850 lbs to 700 lbs — for 12 minutes

This shows its just as bad with 700 as 850 — it also shows when get cause of breaks 700 pressure will be enough as only 1 low spot in all these —

June 18/1916

Took a reg diamond faster reproducer so it couldnt move Then let it run on smooth part so long at it didnt cut there - latest to 160 Rev up to several hundred -

Ran it 100 hours

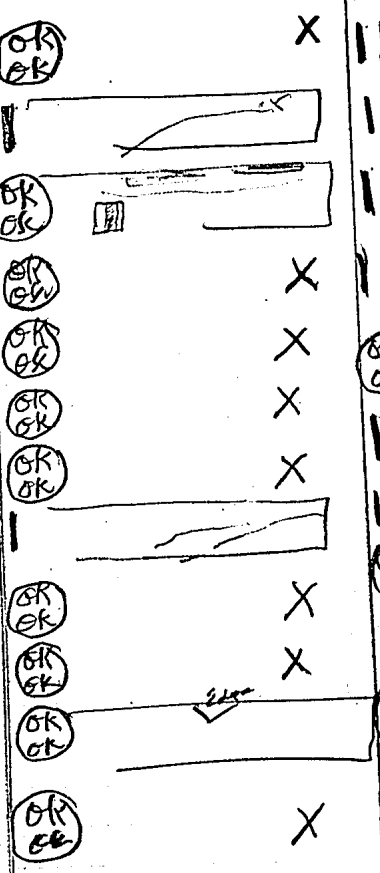
480 000 Rev it showed

a round wear spot probably more polished than other part of area —

The tried it on reg loud record after 400 times it showed no wear at all & is superior to fresh diamonds probably because it has more bearing surface -

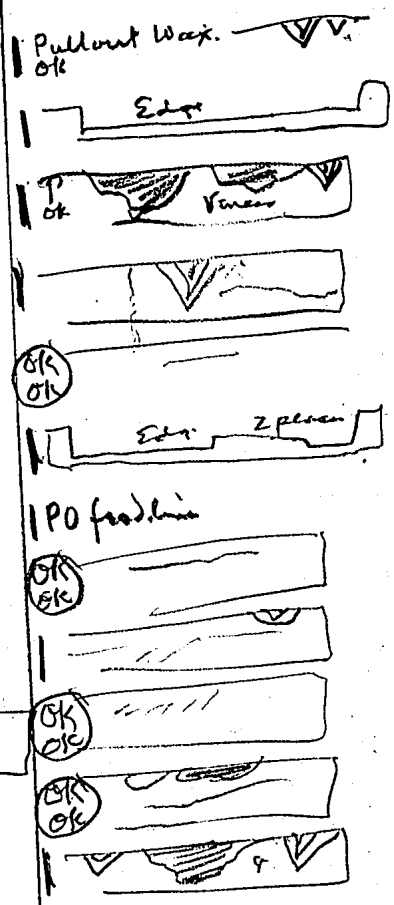
This shows Diamond will in Customers hands last for years

1196E
Good Edges



83 %
66 %

1196
Bad Edges



33%
none

1196 – New Square Edge
Mould
3 with no gasket

One round with sharp good Edge. + One round with bad Edges –
Specially selected —

6-19/16

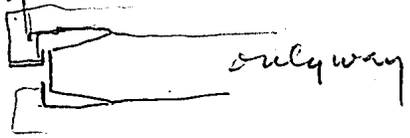
Only 2 things are left that can cause Crush of Edges + the other troubles.

"Soft places around Edge"

"Want of Universal joint,"

later

Neither do it, Edge is line of least resistance + it squashes



1197 E
1 pr

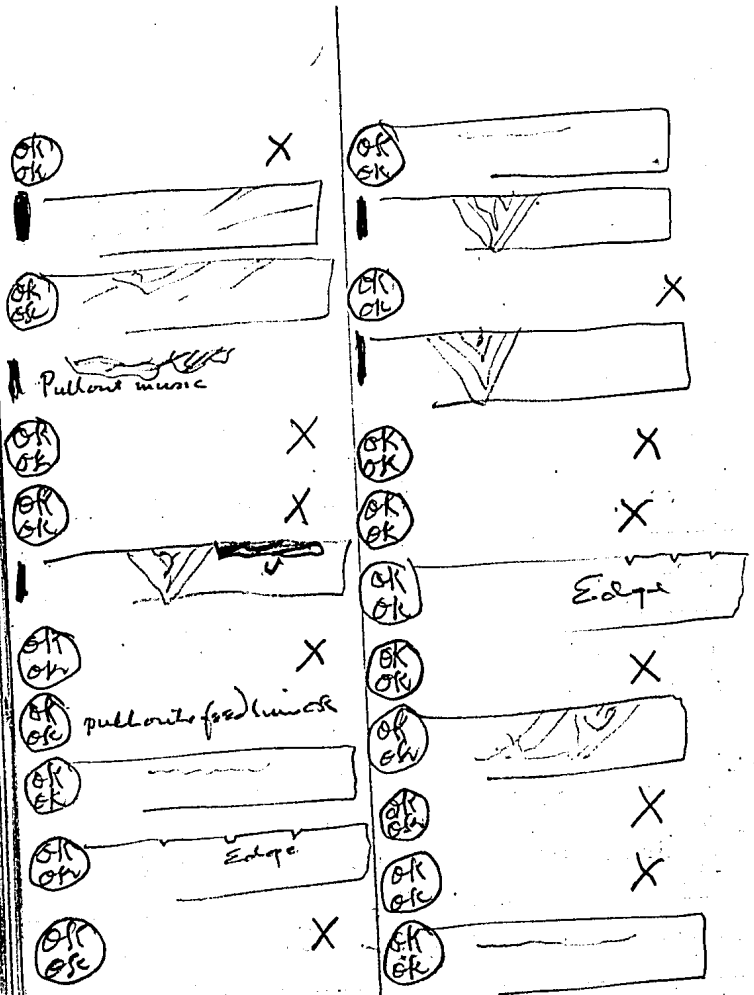
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK X	OK OK	OK OK X	OK OK X
OK OK	OK OK	OK OK X	OK OK
OK OK	OK OK Loose 3	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK X	OK OK
OK OK X	OK OK X	OK OK	OK OK X
OK OK	OK OK	OK OK	OK OK X
OK OK	OK OK	OK OK	OK OK X
OK OK X	OK OK	OK OK	OK OK
100%	100%	100%	100%
25%	8%	25%	33%

1197 E

Reg Moulds – Lead gaskets
4 Rounds of Tailings
treated with $\frac{1}{4}$ of Lac
additional –

Note – Pull outs along Edges
This is special to this mix
with Lead gaskets

Note also same blanks
in square Edge no gasket
moulds 1208 E
OK & good no pos on
Edges



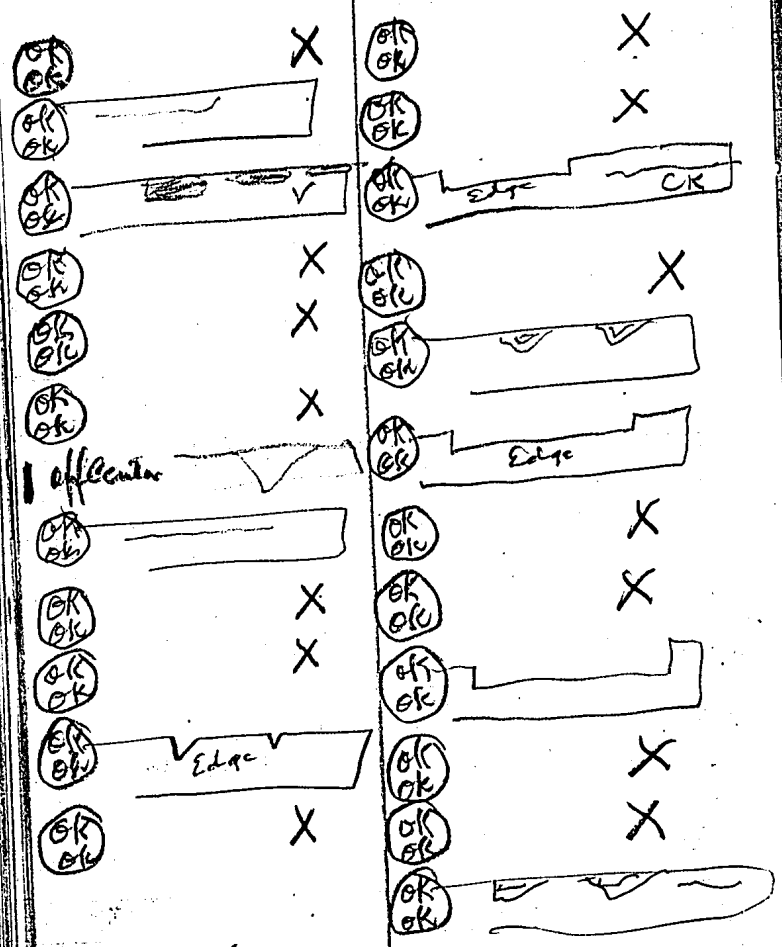
1198 F No Lead gaskets used

2 Rounds blanks made with Extra rubber round the Edges of big rubber - Use Extra ring to prevent big rubber flowing

Use these blanks in Square Edge moulds

No Lead gaskets

1199E



91%
58%

100%
58%

1199E #3 Load

Sgt Edge Wheels,
3 without Quakes

2 Rounds, #3 load

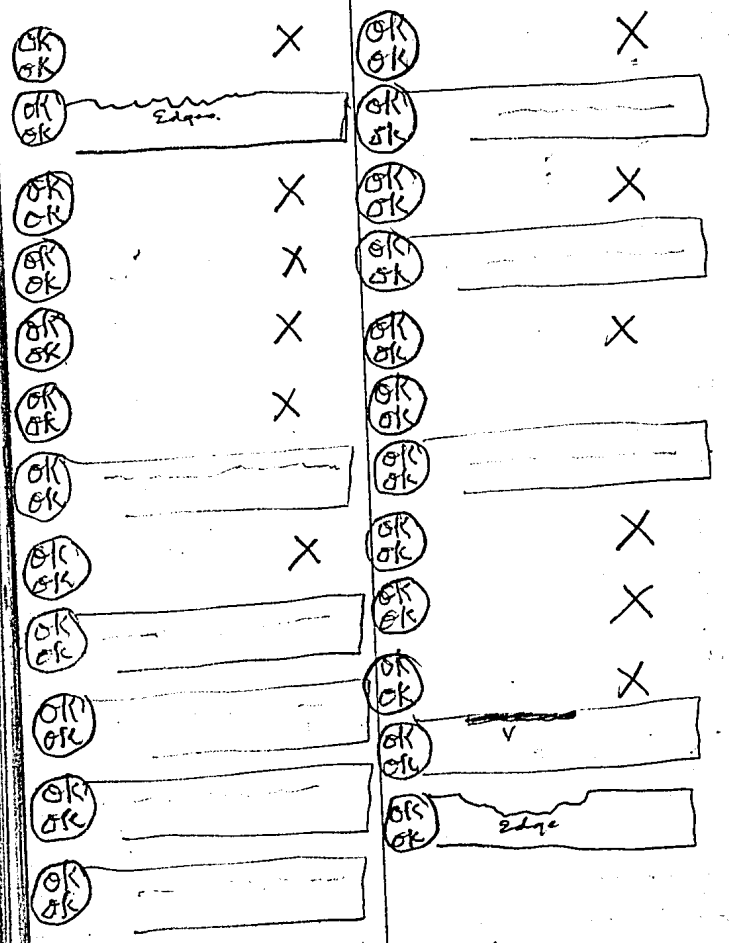
Schedule,

Bring to contact needle off pin when the lamp gets to 200 Fahr dont let it go above 200 for 2 minutes Then put on 850 lbs for 12 min

Doubtful improvement

Load 1 = New Mouldo no gaokato
Varnished on Edge Req 1522 B blay
Lot 228 | new wood -

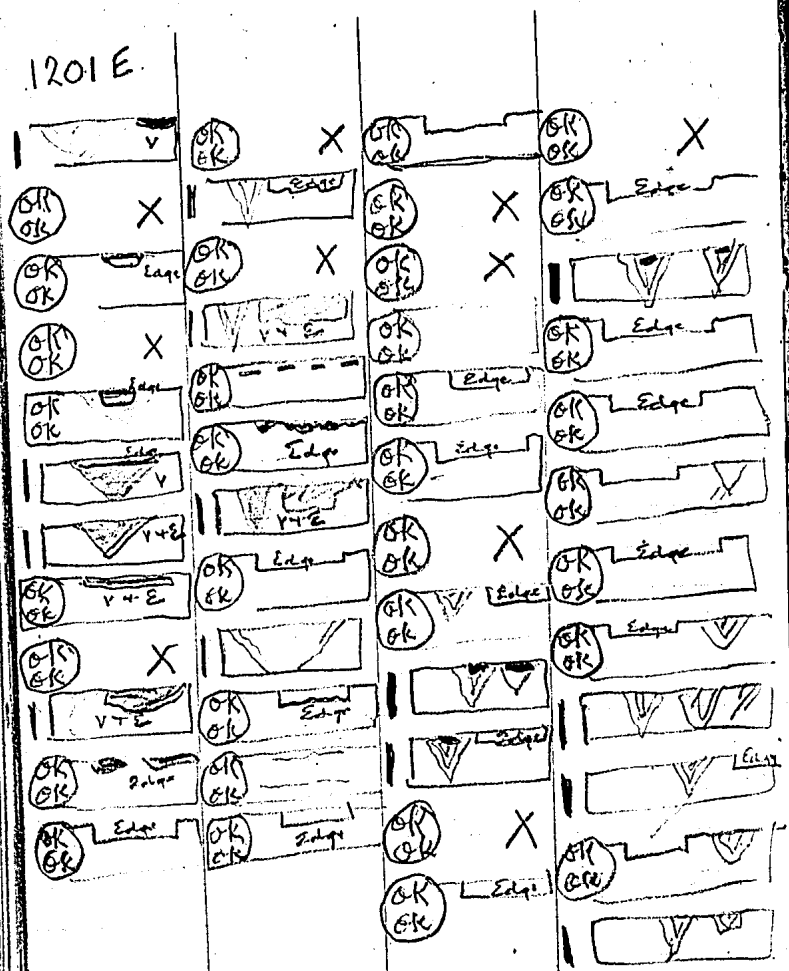
OK OK X	OK OK X
OK OK	OK OK X
OK OK	OK OK
OK OK	OK OK X
OK OK	OK OK X
OK OK X	OK OK X
OK OK	OK OK X
OK OK X	OK OK
OK OK X	OK OK X
OK OK X	OK OK
OK OK	OK OK X
OK OK X	OK OK X
11	OK OK
100%	100%
54%	75%



1200 E

Print two rounds of Edged (smalled) blank worth #1 Load of Square Edge moulds

1201 E



58%	66%	83	66%
25%	16%	33%	8%

1201 E

See 1211 same blanks in New Sgr Edge no gasket moulds

Hoffman —

Make some powder without any Para in it just Shellac

Make 8 Rounds of blanks —

Send 4 Rounds up Stacis print acquiesce in Reg Moulds

Apparently not so good as with Para

Not Certain — no improvement in any Event

1202 E

OK OK

PO at feed

OK OK ×

OK OK

OK OK ×

OK OK

OK OK both sides

OK OK

OK OK ×

Oil at feed line –

OK OK ×

OK OK

83%

33%

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

Oil at feed line

OK OK

OK OK Low 3

OK OK

OK OK

OK OK

OK OK

91%

none

1202 E

2 Rounds w/ #1 Load

Square Edges –

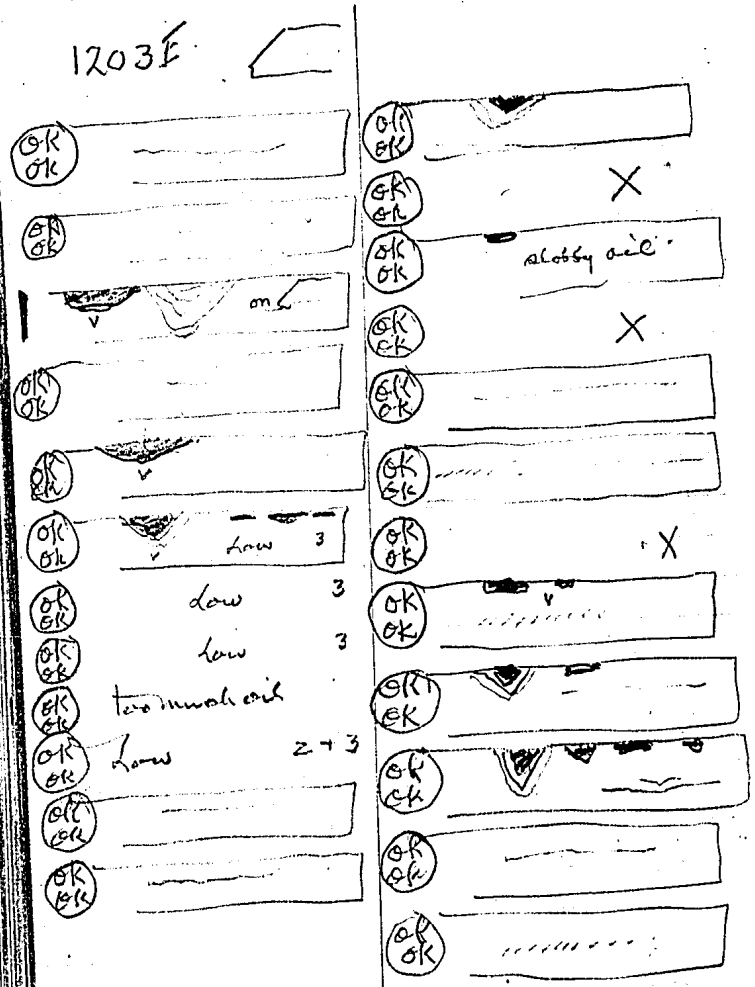
Varnish Edges –

Blanks made with

700 lbs Rubber

Pressure

1203E



91%

none

Veneers PO all on large Diameter face

100%

25%

Veneer PO all on large die

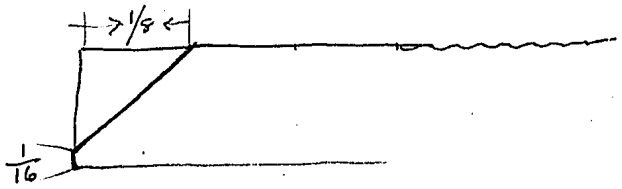
1203E

Use # 1 set moulds

2 Rounds of blanks.

700 lbs rubber pressure with Extra ring —

Bevelled off $\frac{1}{8}$ of inch



Use only those whose edges comes through edging OK.

Not good = Too many pull out of Veneer on large side —

1204

OK OK — short

OK OK — Bad Lace 3 — Excellent

OK OK — Low 3

OK OK — X

Bad Lace 3

Bad fill — 3

" 3

OK OK — Low 3

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

no fill and Edge Laced 3

OK OK

OK OK

58%

8%

95

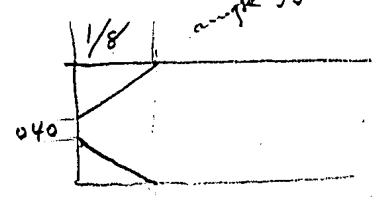
1204E

Use # 1 set moulds —

Print 2 Rounds,

Use blanks made with 700 Lbs rubber pressure and extra ring

The edges to be bevelled both Edges



Use regular Schedule

NOTE = Cannot fill if Edges are free to swell = to fill, Expansion must be restrained to permit fill —

also Cracks are too close to music less than 1/8 in many Cases

More restraint to Expansion better fill & closer to edge are Longitudinal Cracks —

Callipers of our records 50 turned out June 20 1916 —

Average 209/1000

High 223.5/1000

low 199/1000

200 is our old limit

This is with 600 lbs rubber pressure no extra ring —

With 700 lbs which we start using today with extra ring thick they will be a little thicker,

OK OK	
OK OK	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	
OK OK	X

100%

75%

OK OK	X
OK OK	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	
OK OK	X
OK OK	X
OK OK	X
OK OK	

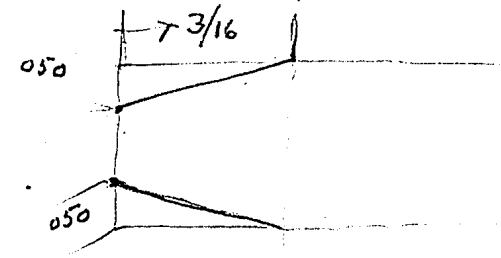
91%

66%

1205 E

new wood

2 Rounds in #1 moulds



Blanks 700 lbs pressure on rubber -

Runt Reg

600 lbs RP	700 lbs Rubber pressure		
OK OK X	OK OK	OK OK V	V
OK OK X	OK OK Edge	OK OK Edge	OK OK V
OK OK X	OK OK Low 3	OK OK	OK OK X
OK OK X	OK OK X	OK OK X	Feed line bad
OK OK X	OK OK	OK OK X	OK OK Low 3
OK OK X	OK OK Edge	V	V
OK OK X	OK OK X	OK OK	OK OK
OK OK	OK OK V-Edge	OK OK Low 3	OK OK Edge
OK OK X	OK OK V-m	OK OK Edge Low 3	OK OK V
OK OK X	OK OK V		
OK OK	OK OK V	OK OK Low 243	OK OK
OK OK	OK OK V	OK OK	OK OK Edge
OK OK V	OK OK	OK OK Low 3	OK OK
100%	100%	91%	75%
69%	8%	16%	8%

700 lbs Rubber pressure

New Mould's Square rings

Blanks Vers on Edge

Continued from 10 page back

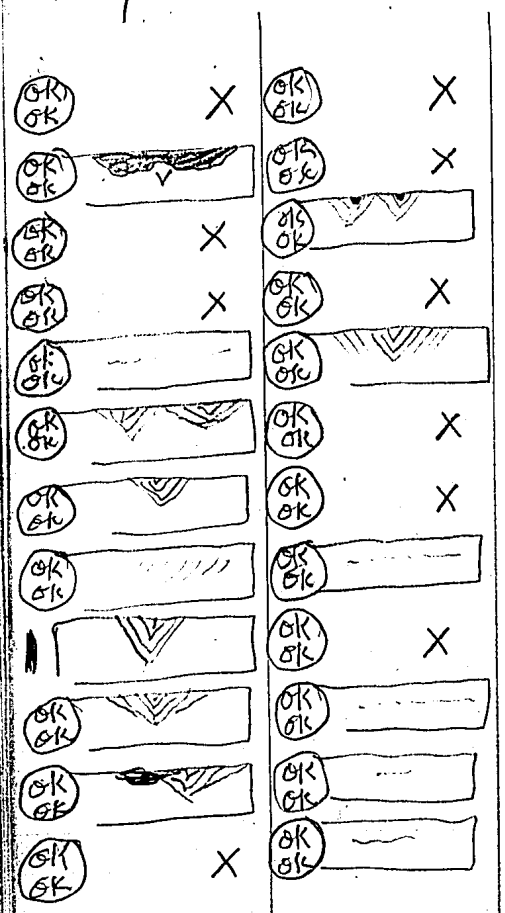
New wood

1206 E

Hurd let me come
of the Diamonds.
from Numbering
& Washing

Saw them Numbering Washer
Chips out the most,
Bad Matching next,
Hurd is looking after it

1207



91%

33% perfect

100%

50%

1207 E

2 Records

Blanks made larger in special powder mould - To be printed in #1 load of square edged moulds - Blanks to be edge 005 smaller than the inside diameter of Mould ring Varnished on Edges.

Blanks made with Extra ring + 400 lbs hot Ex pressure

OK OK	X	OK OK	X
[redacted]		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK Low 3	
OK OK	X	OK OK Low 3	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK Low 3		OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
91%		100%	
83%		66%	

1208E

Present in #1 Square Edge Mould
2 Rounds of Blanks from
Retreated Tailings ¼ more
lace.
Present Req

Drop test on blotting pad
on floor
4 ft

1 — 1 Drop Broke —
2 — 2
3 — 20
4 — 5
5 — 3
6 — 20

wants — about 3/10 to 35/100 lac
instead of .25

1209-E

Ok Ok	X		
Ok Ok	X		
		Ok Ok	X
Ok Ok		Ok Ok	X
Ok. Blk.		Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok		Ok Ok	X
		Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok		Ok Ok	
Ok Ok		Ok Ok	X
Ok Ok	X		
83% 50% Perfect		83% 75%.	

1209E

Hoffman—

Can you rechuch & screw discard records, using 1/4 more shellac so we can make a test & get some fines as required if so let me know,

Thos. E. Brown Wm. Bu[illegible]

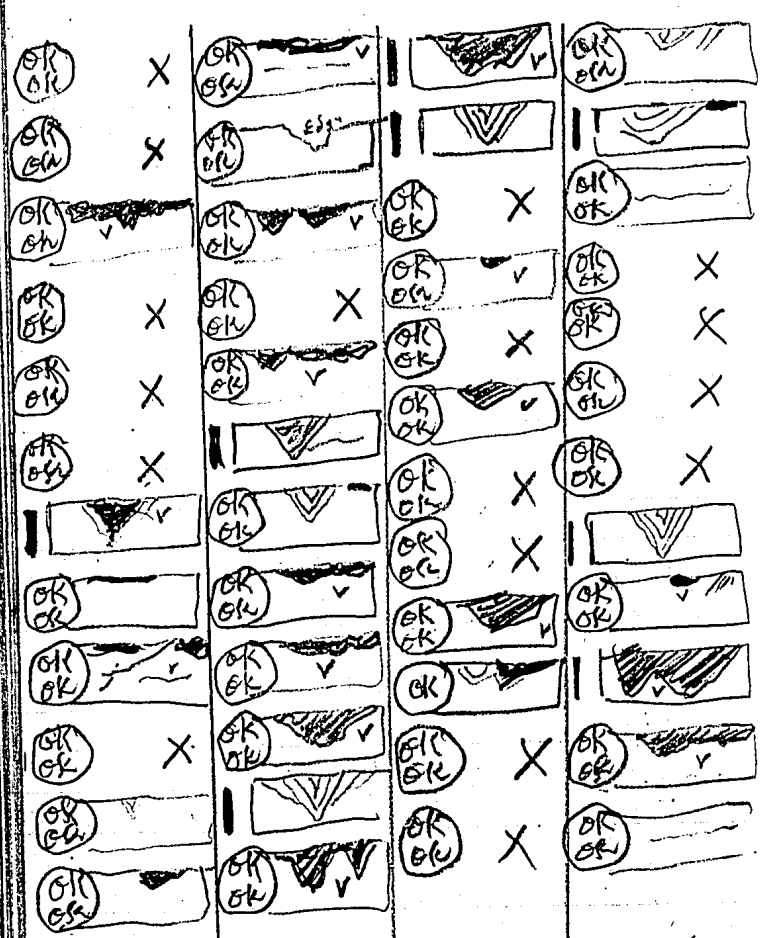
3/16
050
050

Finished end: Print in Regular Moulds

1210E

OK OK	OK OK	OK OK
OK OK	OK OK	OK OK
OK OK	OK OK	OK OK

1211



91%	83%	83%	75%
50%	8%	54%	43.

1211 E

2 Rounds of blanks used in 1201 E Varnished on Edge Hoffman made Extra ones + has them

New mould
83% OK 37.7 perfect
old Mould
68.2% OK 20.5 perfect

Apparently shows occasionally of new Sqm Edge no gasket moulds
Mix not good –

The reason I raise the Shellac is that it probably varies + sometimes gets too dry (10) mix + core have cracks.
1/10th Extra should take care of this variation

1212 E

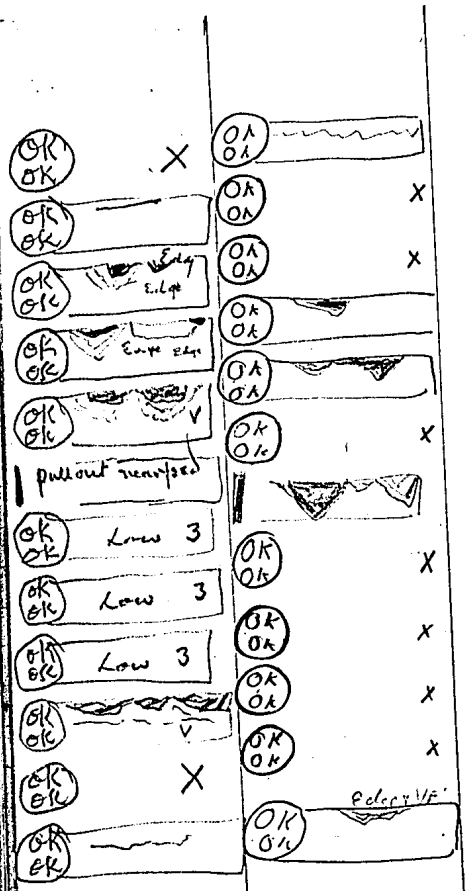
Hoffman

After today June 22 1916 Use One + one tenth of Shellac in regular mix until further notice –

Edwards

Aug 1 = 1 1/10 is too rich + requires too much for beveled Edge Moulds but OK for square Edge – We now abandon 1 1/10 + use 1 Case

[95]



91 %. 91 %

16 %. 58 %

1213

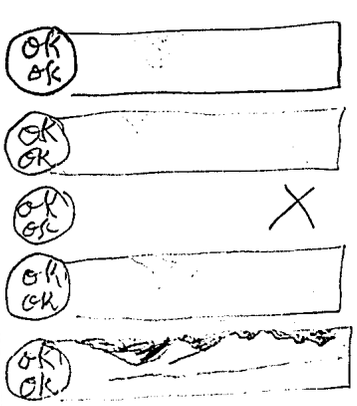
Print on #1 Load moved

2 Rounds of 1173 E

Blanks —

Square Edge — Vacuumsealed

on Edge —



1214E

One blank about $1\frac{1}{2}$%
Cotton seed flock –
Reg powder used –

Point in square ring
moved, blank unmoved on
Edge

Surfaces OK —

OK OK X	OK OK V
OK OK X	OK OK X
OK OK Edge	OK OK X
OK OK X	OK OK V
OK OK X	OK OK X
OK OK V	OK OK Edge
Accident —	OK OK Edge
OK OK Edge	OK OK X
OK OK X	OK OK X
OK OK X	OK OK X
OK OK Edge	OK OK Edge
OK OK X	OK OK X
91%	100%
58%	58%

1215 E

Two Special Mould holders the rings 3/32 less inside diameter than Reg new rings Moore to Calliper up & have them OK Then to make 4 rounds of regular blanks Edged down 005 smaller than rings & printed in These 2 moulds & sent to music room as fast as Lots of 6 are printed

1216·E

75%	91%	100%	75%
16% Reject	25%.	25%	16%

1216E

Hoffman

Make up a bunch of powder but put twice the amount of Para you generally use in 1522 B

Make up 150 blanks —

4 Rounds to be printed in #1 load of moulds save the balance of blanks —

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
100%		100%	
91% perfect.		100% perfect.	

1217E

Print 2 Rounds of 1205 Blanks in Reg Moulds with ~~[illegible]~~ gaskets.

NOTE

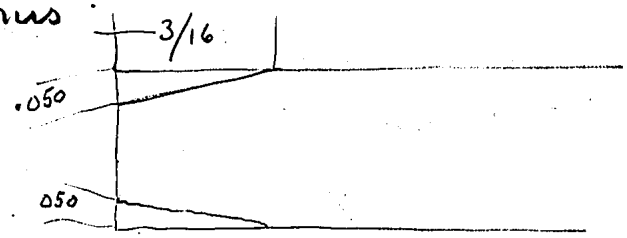
JUNE 23.

today & hereafter
1522 Blanks will
have $1\frac{1}{10}$ Shellac in
& Be Marked
1522 C

1218 E See further on

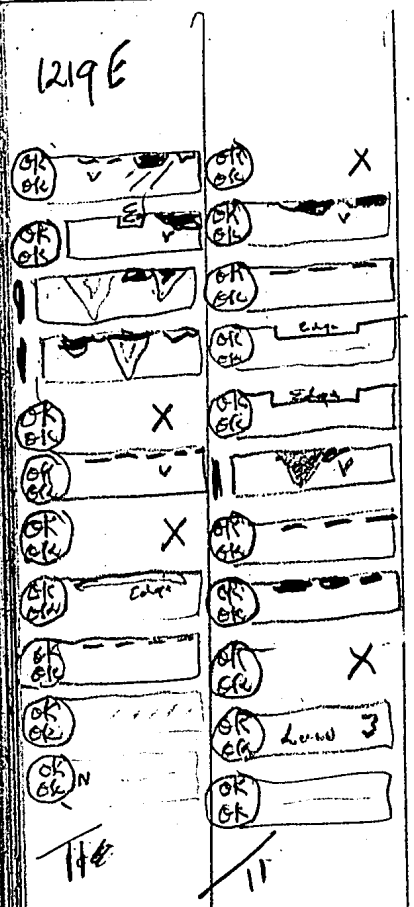
Lubr

Grind out a powder
Top & bottom
blank moulds to form a blank
thus



Hoffman make 2 rounds of
blanks to be varnished on edges
& printed in #1 load of Moulds
Continue making blanks until
notified to stop

1219E



1219E

Reg 1522C Blanks punched in Reg lead gasket mounted with BALL JOINT PRESS

Ball dont save Edges

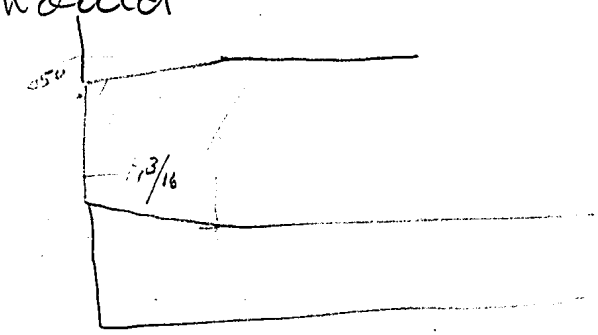
1218E

				June 26		June 26	
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK		OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X				
		OK OK	X				
100%		OK OK	X				
100%		100%		100%		100%	
		100% perfect		91% Perfect		75% Perfect	

Continued on next page

1218E

Special Powder Blank Mould



The trouble with this is surface is fine on about a louder on and pressure greatest on edge hence less at label = mottled on smooth inside & flat as on edge – Not sure of this

Calliper 240 235 251 / 1000

Wgh Weight Req 446 This 510 gr

~~Should be rolling mould~~

~~but cut down~~ – this is

~~doubtful~~

This must be cut down

1218E Continued

Ok Ok	X
Ok Ok	
Ok Ok	X
Ok Ok	X
Ok Ok	
Ok Ok	
Ok Ok	
Ok Ok	
Ok Ok	X
Ok Ok	X
Ok Ok	X

91

50 % perfect.

Continued from back pages

1210 E

OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK	X	OK	X	OK	X
OK		OK	X	OK	X
100%		100%		100%	
91% perfect		100% perfect		100%	

1220 E

Ok Ok x	Ok Ok x
Ok Ok x	Ok Ok ok.
Ok Ok x	Ok Ok x
Ok Ok x	Ok Ok x
Ok Ok x	Ok Ok x
Ok Ok x	Ok Ok ok
Ok Ok x	Ok Ok ok
Ok Ok x	Ok Ok x
Ok Ok x	Ok Ok x
Ok Ok x	Ok Ok fair ok.
Ok Ok x	Ok Ok x
Ok Ok x	Ok Ok x
100%	100%
100% perfect	66⅔% perfect

1220-E

4 Rounds

Make 4 rounds four long edged, rounds other edge side is separates because the wood due to drying

Print 20g.

1221-E

Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X	Ok Ok	X
Ok Ok	X		
Ok Ok	X	Ok Ok	X
100 %		100 %	
100 % perfect.		100 %.	

1221-E

24 Blkw. of 1205-E

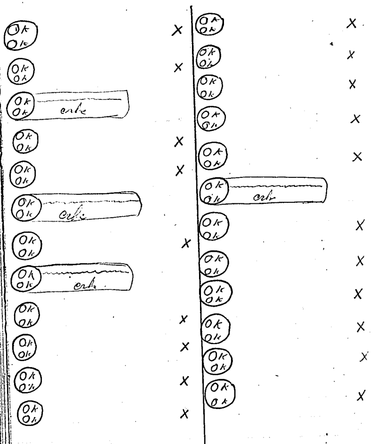
Varnish all over.

Print in regular Seal of Models but did not use any B. solution around the margin of these Models.

Print Reg.

1209 E Continued

1222-E



100% 100%

75% good 91%

1222 E

2 Rounds

Reg blanks made in special mould used in ~~[illegible]~~ 1218 E but ring cut down to get thinner blank

Highest Calliper 235

215	221	214	219
215	224	217	224
211	219	222	227
211	214	215	222
215	221	219	226
215	216	218	222
215	224	211	214
224	235 —	214	228
215	224	215	230
212	213	209	213
215	219	206	216
208	216	217	224

This is Ok providing we want to use this scheme

1223

Little if any deference between the 1st & 12th in 1st Round —
am getting weak lungs & try it again —

1223 E

Load #1 Two moulds are never to be cleaned or touched or ~~oil~~ solution used, only feather duster is to be used, Save the records until 24 is made as soon as 6 are made send them down — Each time —

1224 E	2nd Trial less Var but little more than Reg	
OK OK X	OK OK	OK OK X
OK OK	OK OK X	OK OK
OK OK X	OK OK X	OK OK
OK OK X	Cracked	Ckd
OK OK Low 3 ok Dont hear	OK OK X	OK OK X
Fern small in Music	OK OK	PO in Music
OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X
OK OK 2 spots may be PO	OK OK	OK OK
OK OK X	OK OK	OK OK X
OK OK X	OK OK X	PO in Music
	OK OK X	OK OK X
91%	91%	66%
58%	58	50%

Dont look as free can increased Varnish)

1224 E June 28/16

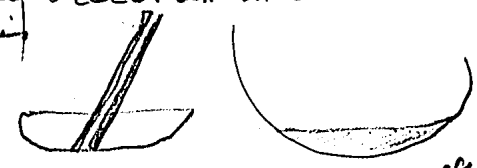
Regular records 3/16 Taper One coat varnish but put on thicker to make record more water proof It takes longer to dry on the rack than those we have been doing will get the time of drying for comparison This has a fern showing the Varnish is put on too thick Will Compromise & reduce it but use more than is regularly used on June 28/16

The water affects the surface just before red line & then generally clears, all clear when get in 1/4 to 3/8

Think we should use a shade more Varnish than now, but very little as alcohol affects the stability of the blanks, leads to weaken the edge & produces Radial Cracks & also Cracks which permits PO of Gases —

6/28-16

Soaked ~~[illegible]~~ 20 minutes Seconds in water



	OK	DISCARD.	Bad Tolerance	OK Only little
Reg	II		II	I
Very much	IIII	IIII	II	III
Medium	III	I		IIII I

Medium means one coat of Varnish is put on a little thicker than was put on regularly

Very Much Means Varnish put on quite thick so it takes some time to dry —

Reg		Medium	Very Much
	100	91	91
	85	58	58

1225 E

5 Blankets soaked 1/2 in water then dried 1 1/2 hours —

Vacuumed

Printed Reg

After baking 3 warped very bad — sent 2 to print —

The 2 print OK & round fair —

Flow too much wants 1 1/10 instead of 1 1/4 Lac.

1226 E

2nd Round	1 Round
OK OK X	OK OK X
OK OK X	OK OK
OK OK X	OK OK X
OK OK X	OK OK X
Com 1 ck	OK OK X
OK OK ven	OK OK
OK OK X	OK OK X
OK OK X	OK OK
OK OK ck V	OK OK
Cracked blank	OK OK
Com 1 clea	
11	OK OK
	OK OK
90%	100%
54%	41%

1227 Best for Water —

Mould 180 more blanks —

1226 E

Weigh 486 grams

Calliper			
	221	227	226 –
	230	233	231 –

Hoffman Make up ~~[illegible]~~ enough powder for 200 blanks 3 – 4 & 1 11/4 Lac

Make up 24 blanks &

Print Reg Hold balance

powder 1

Soaked 10 min Water 1 edge

Face	1 –	6 grains	none in music	
	2	3 "	3 in music	
	3	5 "	none in music	
	4	6 "	many in music	
	5	6 "	"	
	6	4 "	none	

Think 1227 better.

Regulars —			
1 —	8 grains	Smooth	None in music
2	none —		
3	6 – 5 in music	band	
4	6 & 6 in music	band	
5	none —		
6	none —		

Breaking 4 ft drop

1 —	20 drops
2	3
3	10
4	20
5	11
6	2
7	2
8	5
9	1
10	20

Debut happened than 20 drops

30th June —

On June 29/16 – 116 moulds discarded being all discarded on that date. Had received following number of records

223	155	88	458	83
326	202	159	488	75
261	380	151	264	136
164	448	217	136	328
237	175	170	130	318
229	325	231	214	18
231	297	272	36	462
325	278	260	227	75
67	258	227	260	138
164	48	181	272	30
219	385	370	159	19
237	318	54	68	45
125	19	110	142	2
325	261	398	61	2
174	221	462	347	average 245
155	223	49	174	
167	233	214	191	
202	12	163	176	
292	259	145	258	
380	12	373	362	
448	355	496	124	
155	175	862	188	
80	325	59	124	
50	297	59	71	
152	1247	196	46	
217	1247			

OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK low 3	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK low 3	OK OK X
OK OK X	OK OK X	OK OK low 2	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK low 3	OK OK X
OK OK X	OK OK X	OK OK	OK OK X
OK OK X	OK OK 1 ok	OK OK low 3	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X			
100%	100%	100%	100%
100% perfect	91% perfect.	58%	100% perfect

1227 E

July 3rd 1916

Experiment on mixing

Put in fibre & lampblack
Mix well then add
Shellac Varnish
Mix fairly well then
add Black & mix
till it appears OK
make ~~test~~ four rounds
balance
Hold the powder —
~~test~~ test for Waterproof —

10 Min soak in water — OK only in one surface of 6 did notice slight RO Effect due to water — Think this way of mixing is an improvement but not quite for needed

OK X	PO
OK	OK X
Dressed forms	OK X
OK	OK X
OK forms label	
Pull oils -	OK
OK X	OK X
OK X	Mforms from
OK X	OK X
Mforms big -	OK
OK X	OK X
Mforms	OK X
	OK X
66%	83 %
41	66 %

1228

Reg blanks -
Coat one layer Varnish
Dry 2 hours then another
Coat dry 2 hours -

Print 2 Round on
Weak moulds —

Two Coats seems
impracticable —

OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK	OK OK X	OK OK X
OK OK	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK	OK OK X
OK OK X	OK OK X	OK OK	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
N Washed	OK OK X	OK OK X	OK OK X
OK OK X	OK OK Low 3	OK OK X	OK OK
OK OK X	OK OK X	OK OK X	OK OK
		OK OK	OK OK
100%	100%	100%	100%
91% Perfect	83%	83%	75

1229-E

If necessary This to OK —

Make a seg lot of powder 3 wood 4 Check $1\frac{1}{10}$ face —

Run thru 4 rounds on Special Moulds load 50

Keep balance of powder till Lacy. make up —

Drop 4 ft on blotter

1 —	5 Times	9 —	1 times —
2	2	10 —	5
3	6	11 —	2
4	1	12 —	3
5	2		
6	9		
7	7	Hawaiian auto fine accuracy	
8	1	Holes opposite side rough — note —	

July 6 1916

Re test of 1226 1227 + Reg records not edged — soaked in water ONE HOUR.

The grateing sound or run out sound on 1227 + Reg are about the same, if any change its favorable to Reg —

1226 is better than either 1227 or Reg for Run out + general surface as far as water proofing + surface its a distinct improvement

Edge are swelled very bad on Reg
" " not so much on 1227
" on 1226 are very little swelled

1226 Best

C151J

Dimwiddie Went over a Calliper and
Rag blanks —

236 —	251	15 —
236	259	23
241	263	22
240	256	16
232	245	13
240	267	27 —
243	250	7
226	253	27
229	248	19
223	251	28 —
242	255	13
244	255	11

Rollan

1230 E

One round of blanks made by Dimwiddie in new powder loading machine —

Calliper

247	260	13
241	260	19
250	265	15
242	254	12
252	260	8
236	248	12
243	251	8
237	249	12
249	264	15
244	247	3
243	247	4
263 -	273	7
245	256	
High	263	
Low	236	

Should be 240
@ 245

2nd attempt

252	257	5
245	255	10
238	255	17 —
226	247	21 — worst
252	258	6
239	246	7
248	252	9
238	249	11
239	256	14
248	266	18 —
249	254	5 —
239	259	20 —
242	High 266	
	Low 226	

Too much & too much Variation

Drop Test July 8 1916

Regulars

4 ft drop flat on Blotting Pad of my desk

# of Drops	
9	
3	
14	
10	
20	This is good
6	Enough to Cancel
10	
17	
4	as Dropping from
20	hand on Carpet
10	
20	is less severe

Will drop 6 diamonds twice a week to check

[155]

July 12 — after 33 prints —
Examined 12 records 2 months old
They are OK, for surface

11 @ 12000 Varnished 6 blanks
July 17 daily 20 girls days
4 man nights —
4/10th cent each —

After varnishing blanks
there are small holes &
pull out rough spots with
a number of holes —
by spaling each with a
very small quantity varnish
6 printed this way — 6 faces
got. 19 snaps unspalled
on another set moulds
got 45 snaps — looks as
if spalling diminished snaps

123KE
Load 50 — Keep running
night + day — test 2 rounds daily
for surface.

B
1232E

Two rounds of worse blanks than A Blanks on other page —
These are discarded with Hoffman Dept,

OK OK X	Cracked.
OK OK X	OK OK X
OK OK X	OK OK Looks like PO sound OK
OK OK X	OK OK X
OK OK Low or PO OK 1	Snaps 2
OK OK —	OK OK Low 2
OK OK X	OK OK X
OK OK X	Pouts —
OK OK X	OK OK X
OK OK X	Cracked —
OK OK Low 3	Cracked
Broken	

91%
66-% perfect

A
1232E

Ordered blanks pressed

A lot of rejected blanks (pullouts) which were made 1st half day 12th at night. The rejections were more than usual —
Took 2 Rounds where Pull Outs bad —

OK OK minimum bad Edge	OK OK —
Cracked Mine OK	OK OK X
OK OK Low -	Low 2 position Spot Discard
OK OK —	OK OK X
OK OK X	Low spot 1/8" dia 2 position Varnish spot
OK OK —	OK OK —
OK OK X	OK OK X
OK OK X	OK OK X
OK OK X	Varnish spot 2 1/4
Cracked 45	OK OK X
OK OK —	OK OK X
Pull outs. 33%	Cracked 66 — 50 %

1233-E

Load 51 has moulds with
No Mottle - They are
running them to see
if Mottles develope -
up to 50 rounds I examined
10 faces. - 7/14-/16 -

No Mottle	Very Mottle Light	only traces of Mottle
4	3	3

Surfaces on most were good -
Cant say if there wasnt some mottle
originally -
Of the original 12 - 3 were discarded
1 for Eccentric. 2 for Dents.
4 off for repairs - Dents are from
pieces of Chunk falling on moulds or
pressed in.

C(61)

1234 E

Blanks with holes in — separated by touching with a spot of [illegible] of [illegible]

Where P Out in blanks given deeper [illegible] [illegible] —

July 17/16

1235 E 2 Moulds run

Contemporaneously & not washed

Kalma Waltz

		good satisfactory Record
1st		Start not good - general surface Even & about V,
12		dito
24		dito
36		Slightly louder
48		Same
60		Same
72		Same
84		Same
96		Seems to improve
107		Same
120		Apparently just as good as when it started
132		about same I think little snap X came in
144		Same
156	Cracked	
178		Rough start, slightly snapping
190		Very " Reject."
202		

Start bad - Reject.

These were not preceded in new mould with square ring

Josephine Polk Opposite

Very good record throughout

1st Record surface start smoother than Relation

No 1 Surface V Even Start fair -

12		Surface Even not V.
24		dito
36		dito
48		dito
60		dito
72		dito
84		dito,
96		do
107		do
120		about same as when started
132		OK Snap repaired
144		OK same
156	Cracked	
178		
190		nearly OK yet has lost little snap nearly as good as start
202		getting little stammy
214		Mould - Reject

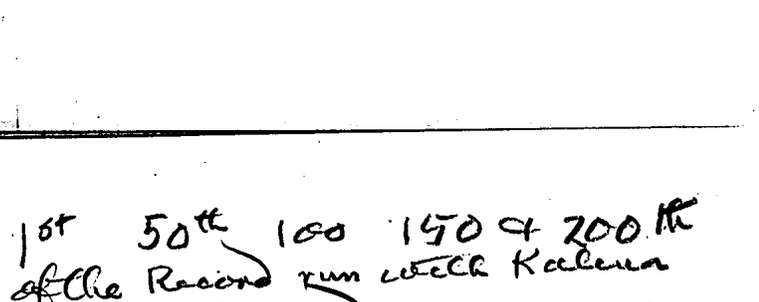
Start too loud -

OVER

These probably accounted for bad start

1st 50th 100 150 & 200th
of the Record run with Kalma
vs Ally Record —

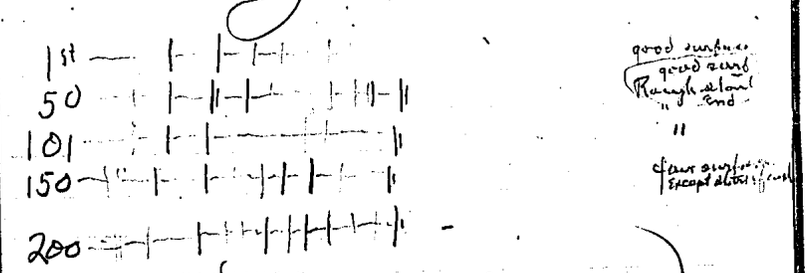
~~Commodore~~ Kalma —



Rejected

This mould had very bad start
should never have been put on

Josephine



Start bad from 1st = This mould
would not run more than
a dozen more it would be
too rough on start

1236 E

2

Moulds which have gone
50 times were Nickel
plated by Demonstrie
to be run till further
notice —

Have every 12th run

Not washed

Taken Off —
Peeled — Mi too thin —

1237E

Expects to find out what knocks mowers

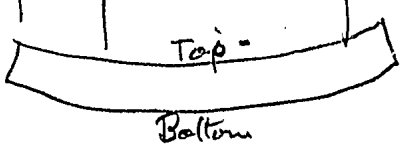
2 Discards 4524-C-E-199 Dent 57 prints
4514 C C 178 WDent 65 prints

Put 005 crushed glass — about 50 pieces scattered all over-blank — put top on, let it drop 1/4" then hold it permitted.

Blanks-

The warping is always

Thus



Always Convex on the bottom -

1/3rd are flat, why ?

sometimes 50% dead flat,

As there are pieces falling

girls.

Varnishing Dept	59
Oiling blanks	6
Printing	1
Sorting Records	5
Eye Inspectors	8
Machine Test	6
Edge Inspect	4
Mould Test	9
Numbering Sorting	11
Finish, Wash, inspect	60
P B Inspection	6
Matrons	3
Office	5
Repair Room	21
Celluloid Print room	5
" Dip	4
Clerk	1
	214

Details
Varnish Dept

20 Varnishing
20 Carrying blocks to dry rack (unnecessary)
5 filling Racks for ovens
5 taking from Racks after bake - inspection
6 Coverscreening & inspecting for scratches
3 taking Van blocks from Inspector & putting on record rack for delivery to Oiling Operation

1238E

Exports 6 lots 12 each
blank with 1916 desk on
season + every day calendar
one lot for drawing —

Daily Reports Inspection -

	Coach	Perfect	PO	Rounds	PO new ring
19th -	92%	66.9	15%	50	none 20 Rounds
20	88	63.2	17%	20	none 50 Rounds
21	93.9	66.8	14	50	75 - no PO..
22	93.3	56.6	20	40	70 - none 1 Div
24	89.57	55.3	37.5	60	102 none 2 Div
25	90.27	59.2	34.5	60	104 no PO 1 Div
26	86.8	48.7	39.1	60	105 4 PO-4 Div
27	92.6	58.62	34.3	60	127 6 PO-5 Div.
28	93.44	59.50	33.6	60	145 2 Vun Div 1 com Vun
29	94.6	56.3	26.5	55	111 - all OK
31	93.1	56.7	34.5	60	132 all OK

Blank Piecework

	10 hours
1700	25c
1750	27
1800	28
1850	29
1900	30
1950	31
2000	32
2050	33
2100	34
2150	35
2200	36
2250	37
2300	38
2350	39
2400	40
2450	41
2500	42
2550	43
2600	44
2650	45
2700	46
2750	47
2800	48

Records recd by
Baldwin

July 14	7639
15	5080
×	×
17	7006
18	4132
19	5127
20	5138
21	2797
22	5427
24	5089
26	5587
27	5898
28	5256.
29	5236
31	4481

Blanks Made

		Rec'd
July 19	15371	546
20	14745	548
24	9375	"
25	12755	
26	14550	
27	14659	
28	16473	
29	14691	

Monthly Stat

Drop test Keys

11	12-6-9-14-8-6	45
12	20-4-6-5-10-20	65
13	2-8-17-2-13-13	55
14	15-5-5-8-1-9	43
15	2-20-20-8-2-20	72
17	20-10-20-1-20-19	90
18	9-18-3-20-12-1	63
19	12-7-19-20-2-10-	70
21	20-3-1-9-13-7	53
24	8-14-20-2-5-20	69
25	20-3-12-20-4-9	68
26	10-11-9-5-7-20	62
27	20-15-8-3-20-20-	86
29	18-7-20-10-3-20-	48

* new 3/16 Paper blanks.

Average Miller & Upholsters about 7/20 Records

	OK	Perfect	
June 20	80.8	43	
21	84.8	87.5	
22	89.5	53	
23	83.7	51.4	
24	89.2	65.9	
* 26	97.8	81.81	up stairs part old Edgar
" 27	99.1	81.87	
" 28	94.9	80.40	
29	96.74	89.38	
30	97.22	89.79	
1	95.9	90.20	
none 5	96.58	83.50	
6	96.57	85.14	
7	91.3	81.36	
8	97.6	83.5	
10	95.69	84.2	
11	94.3	81.8	
12	95.	76.57	
13	92.7	79.6	
14	91.9	76.3	
15	92.97	74.2	
17	93.	73.8	
18	92.1	67.	
19	92.	66.9	

June 20
Records rec'd by
Baldwin

June 20	7651
21	5571
22	6247
23	3968
24	5230
26	7166
27	8838
28	8465
29	9638
30	10169
July 1	9285
3	9562
5	9101
av 8453	
6	9055
7	9133
8713	
8	7105 Saturday
10	9031
11	6066
12	7149
13	6189

Blanks made

		Sets Run
20th	11470	471
21	13320	471
22	12304	471
23	9489	471
24	8859	465
26	13658	465
27	7260	465
28	13033	
29	7826	
30	8574	
July 1	6871	
" 3	9455	
5	10340	
6	11349	
7	11919	
8	8492	
10	11182	451 Run
11	11862	483 "
12	10828	~~501~~
13	11089	501
14	14493 Piecework	510
15	13439	"
17	14090	529
18	15406	533

Newring Moulds
Sent up by Rzios

21st	31	Complete Moulds
22	21	"

Point for Inspector

Hoffmann - Platters,
" Scored rings
" Dirty Ledges,
" Steel, in blanks,

Rusche -
Slobbering oil on Edges
Scored Edges + polishing
Drill Diamonds too many
Edging Discards,
Seed Moulds are in rotation
before a while Edges are oiled

June 24 1916

Shellac stock 65 000
in NY warehouse 233 000
on Contract Aug Sept Oct 275 000
Jany Febry 100 000

C105

[ITEM(S) FOUND IN BOOK]

1143 E

Reexamined 1100 27/16

1 good elite RO
2 fair to good

3 fair — elite RO
4 Round — old poor mounted

5 fair — RO
6 fair RO } old mounted

Two Uncle Van & Uncle

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 17
Notebook, N-16-07-21

This notebook was used by Edison during July-September 1916 for notes on experiments to improve the surface quality and the durability of disc records. There are also notes by Archie D. Hoffman and other experimenters. The entries pertain primarily to experiments 1238E through1261E. Included are tests involving different presses and varnish compounds, as well as variations in the amount of heat and pressure during baking. Flaws and successful results are both noted. A notation on experiment 1257 indicates that the resulting blank "appears to be the best blank and record we ever had & should be made standard." Also included are two lists of flaws observed in discarded record molds, numbered 41-199 and 1-48. At the end of the book are notes on the number of "girls" employed in the Disc Department, as well as notes about piece work rates, inspection standards, the number of records and molds produced, the number of discards, and the results of "drop tests." Some notes are in the form of instructions to Hoffman. Inserted into the book are several communications addressed to Edison from G. H. Baldwin, Joe Miller, and John F. Ott. The front and back covers are labeled "17." The pages are unnumbered. Approximately 100 pages have been used.

Old Transfer Records - Listened July 21

Run out slight surface

Light RO all thru

" "

OK

Injury Repeat

VV good RO 1/2 wrong

VV good RO 1/2 wrong

VV good no RO

VV good Light RO

~~Bad surface (sand surface)~~

RO all wrong thru

RO 1/2 wrong Repeat bad sound at start & poor start wrong cut

Light RO 1/2 wrong cut

Bad RO all thru

Light RO

1/2 wrong thru - can't find it -

Harrell & RCut ccc wrong thru Perfect

sounds like 3 short snaps close together -

Bingo - Very good surface no RO or snaps Loud bad start

Loud Bangs - Dance

" " "

Loud Band

fair surface slight RO

Big RO - very all thru

big snap surface fair

C13

Daily Halpin rejections —

21st

Tested 45 Records 9 Rejected —

1st Snap — hole in blank

2 2 snaps — 1 .018 Pullout 1 .007 Pull out Varnish

3 1 group 4 moderate snaps — passed — very to Mould

4 5 Big snaps — in group — bubbles in Var. broke

5 Eccentricity — OK —

6 — Center hole too small —

7 Low spot, ok. hardly notice it

8 Eccentricity OK —

22 July

46 — 5 Rejected — bad inspection, on reject —

23 July

19 — 1 Rejected, Rough surface only bad on start
Radial scratches on smooth a 1st 1/2 inch
other part OK —

26th - Tested 45 — Rej 5 —

27 45 — 3

July 26 1916

We find that rough start & final rejection of mould due to rough surface is due to putting blank on Mould without a pin — The men lay them on & move them this puts in radial scratches on smooth part & also on 1st 1/4" of music to 1/2"

By using a ground Matrix & buffer with all scratches out, & by using a long boxwood pin the blank can be put on & record taken off — 50 blanks 50 records without a single scratch or injury to Mould & then 1 revolution of mould at 222 line to Examine under Microscope

The pin is 005 taper made of Boxwood as fcb77 Cant be turned round

[5]

Dropping the boxwood pin on Mould Matrix produces no injury

We noticed that feather duster makes a few fine scratches too fine to be heard on record.
& only 9 of these with 50 blanks put on & taken off -

Evidently Condensate or dust gets on feathers -

---

tested stack of 8 moulds
Records 9 of old mould
9 of new sgr edge

Practically no difference

Hoffman is trying some 'Brass Bright' polish made by Sherwin Williams Co Newark for cleaning moulds to prevent sticking & pull outs —

Hoffman tried Nickel faced moulds, steel highly polished & also matte surfaces but all made pull outs —

He made some Experiments on Warpendency or rather dealing of moulds

Taking out 3 rounds from the same moulds There seemed a coincidence as to dishing —
One moulds gave 20-20-15
another — 3-4-4—

There were others like this — he will make some more test,

Never Worked since Reed

~~27th~~ 23.

C113

July 29/16

This works better under same conditions of weather & all than 1 1/10 Lac

Hereafter Use only 1 Shellac

1238E 1522 Blank

Hoffman

Run through one batch say 400 blanks with 1 Shellac instead of 1 1/10 - & have them all painted under this number &

4 Rounds sent me note pull outs on your moulds as well

Works good

1239-E

OK OK x	OK OK x	OK OK x	OK OK VEN
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK NR x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	VEN	OK OK VEN	OK OK x
OK OK x	OK OK x	OK OK NR x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK NR x
OK OK x	OK OK x	OK OK x	OK OK x NR
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK VEN	OK OK x	OK OK x	OK OK x
OK OK x			
100%	91%	100%	100%
91%	91%	91%	91%

1239 E

Hoffman 400 blanks the fetrex & chalk to be dried to have less than 1% moisture

Run all them & send 4 Rounds to E

See every box

This seems to show dry powder (10) fetrex & chalk dried before mixing

no goods Relays today

OK OK Low 3	OK OK X	OK OK X
OK OK X	OK OK X	1 Ckd
OK OK Low 3	OK OK	OK OK
OK OK X	OK OK X	
OK OK X	OK OK X	OK OK Vent
OK OK X	OK OK	OK OK
OK OK X	OK OK X	OK OK X
OK OK Vent	OK OK X	
OK OK Vent	OK OK X	
	OK OK X	
OK OK X	OK OK X	83%
OK OK X		
OK OK X	OK OK X	
	OK OK X	
100%		
66%	100%	
	83%	

1240 F July 29/16

This is 1201 powder ~~without~~ Para - that is paved & now made up — powder is _____ old

3/16 Revolver blanks used

Keeping this powder has done no harm ~~[illegible]~~ Although technique is changed - they work as good as Regs today

OK OK x	OK OK VEN	OK OK VEN	VEN
OK OK x	OK OK x	OK OK x	VEN
OK OK x	OK OK x	OK OK crk	OK OK x
OK OK VEN	OK OK VEN	OK OK fine crk	OK OK x
	OK OK crk	OK OK VEN	OK OK
OK OK x	OK OK x	OK OK VEN	OK OK x
OK OK x	OK OK x		OK OK x
OK OK x	OK OK VEN	OK OK VEN	OK OK x
OK OK VEN	OK OK x	OK OK x	OK OK VEN
OK OK VEN	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK VEN	OK OK x	OK OK VEN
OK OK x		OK OK x	OK OK x
100%	100%	100%	83%
75%	58%	50%	66%

1241 F

They Edge Easy OK – no trouble

Hoffman Load blanks from Center & Spread so we get soft Edges – 4 Rounds –

test if OK, then Have them Edges & see if they are soft Edges & Edge good Edge all in One machine

41st Record – 3/16 from music out has few very light faint scratches –
Most of the scratches are 3/16 from music & there are thousands of them about 016 long
Notice scarcely a trace of scratches on feed line part – Thinks this technique with Dowel + pins for put on + Tacks off will stop loud start on records

Should find out why any scratches come on or next to music, No reason for any

65th print
few more scratches
but OK – Mould OK yet.
79th had knock in both sides repaired
96th OK – surface about same
not many more scratches near feed line or 1st 6 lines. Haven't any more scratches that had way back
good for 50 or more Prints or more yet
133rd print – about the same as to surface – few knocks at start of Marriage Bells that was on 96th

1242 E

Heart Throb originally most good surface, Marriage Bells upon Golden Bell Condensing mulhorn taken in ~~bottom of horn~~ in copper hill line

New mould, Dowel pins,

New Record moulds in –

These to Go put in a load + printed right along + records saved + sent to Edison –

First heart Throb
23 Scratches probably all old

Marriage Bells
61 scratches probably all old

After 41 Records very few scratches Except near Edge

3/16 Next to music scarcely any

C21

1216-E	96 prints in this Dot.		7/31/12
OK OK VENEER	OK OK ×	OK OK VEN. & Oak	
OK OK ×	P.O. on Music	VEN	
OK OK ×	P.O. on Music		
OK OK VENEER	VENEER		
P.O. on Music	VENEER		
OK OK VENEER	VENEER		
OK OK VENEER	OK OK ×		
OK OK ×	VENEER		
VENEER	OK OK ×		
VEN. P.O. & Oak	Oak		
OK OK ×	OK OK VENEER		
Oak	VENEER P.O. on Music		
	P.O. on Music		
66%	33%		
33%	25%		

1226-E			7/31/12
OK OK × N.R.	OK OK ×	VENEER & Oak	OK OK N.R.
OK OK ×	OK OK ×	OK OK ×	OK OK VENEER
OK OK Oak	OK OK ×	OK OK VENEER	OK OK N.R.
OK OK Oak	OK OK	OK OK VENEER	OK OK
OK OK ×	OK OK VENEER	VENEER	P.O. on Music
OK OK Oak	OK OK ×	OK OK VENEER	OK OK ×
OK OK ×	OK OK N.R. ×	OK OK VENEER	VENEER
P.O. on Red line	OK OK VENEER	OK OK VENEER	OK OK VENEER
VEN Oak	OK OK × N.R.	OK OK Oak	OK OK ×
OK OK VENEER	OK OK VENEER	VENEER	OK OK VENEER
OK OK N.R.	OK OK N.R. ×	OK OK VENEER	OK OK VENEER
	P.O. on Music	OK OK VENEER N.R.	OK OK VENEER
83%	91%	75%	83%
41%	58%	8%	41%

C25

1238-E 7/31/16

OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK NR x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK finish	OK OK x	OK OK x
OK OK x NR	OK OK x	OK OK NR x	OK OK x
OK OK x NR	OK OK	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK VENEER
OK OK x	OK OK x	OK OK fine ok	OK OK x
100%	100%	100%	100%
100%	91%	91%	91%

This experiment while Reqs with 1 to Shellac are sticking bad + giving low % of perfect. 1% Shellac is dry enough so Hoffman reports they dont stick to mould — also that dont crack so bad in records give high % perfect in print whereas today Reg 1/10 Lac are breaking + Causing high % Veneer pullouts

1243 E Hoffman

Few blanks 7 chalk 1

Shellac for Entomologists

blank Sept

Special Graphite Blanks 3 Rounds 8/1/16

OK OK x	crk. 8 Blk	OK OK x
OK OK NR x	P.O. on fed lines	OK OK x
OK OK NR x	OK OK VENEER	OK OK VEN.
OK OK x	P.O. on Music	crk 8 Blk
OK OK x	OK OK x	OK OK x
P.O. on music	OK OK Low - 2 + 3	OK OK x NR
OK OK x	OK OK x	Bad Water spot
crk 8 Blk	P.O. on fed lines music	OK OK x
OK OK x	P.O. on Music	OK OK x
OK OK crks	OK OK x	P.O. on Music
crks	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
75%	58%	75%
66%	41%	66%

1244E

Hoffman

1 Round blanks regular schedule, but hold at 600 for 1/2 the usual time, send to me - Cool 10 min

Calliper for checking

015
035
027
049
042
037
020
025
048
040
050
025
413

0344

1245E

Hoffman:

One second Elements –
Regschedule, but 500 lbs
final – Cool 10 min

Send to me

Calliper for dishing

040
048
042
035
019
045
038
025
030
018
006
058

0337

1246E

Hoffman

1 Round Cylinder -

Reg Schedule Except

400 lbs - held mins & half - Cool 10 min

Send to me

Calipers for Drawing

035
016
035
039
043
006
024
027
038
045
040
038

12 | 386 (32
36
26

.026 average

1247 E

a

Hoffman Made blanks

One round — Bring pressure right up with heat on — hold for 5 min using 600 lbs
Cool 10 min —

Top plate good, bottom a little cloudy — Could use plates again without cleaning — Blanks good surface

1248 Dished —	1247
030	035
050	035
029	043
050	032
043	034
035	035
042	034
035	026
045	055
034	055
045	035
024	032
average 0388	0376

1248 E B

1 Round blanks - Put heat on & bring pressure right up to 1400 lbs for 8 minutes - Cool 10 min

Blank thicker than 1247

Top plate fair - bottom all cloudy - 2 bottoms rough -

Blanks fair surface.

for Calliper see 1247 E

1249 ⅓

LUCK!

One round
Bring Hanks up to
600 lbs Cold, then put
steam on for 3 minutes
Cool 10 min
Moulds clean
good surface on Blanks

Calliper of Blanks			Calliper for chucking
248	242	006	000
267	252	015	000
229	220	009	000
265	248	017	000
252	250	002	006
262	245	017	005
255	240	015	000
257	237	020	012
282	246	036	010
254	250	004	000
250	235	015	006
246	241	005	000
255		13.5	0024
			S S
			1 1

OK OK	OK OK x	OK OK crk	
	OK OK	OK OK Broken Edge	OK OK x
OK OK	crk	crk	crk
OK OK grafitti	crk	crk	OK OK
OK OK Steam on mould	crk	OK OK x	OK OK x
OK OK snap	OK OK	OK OK x	OK OK x
OK OK	crk	OK OK x	OK OK x
OK OK x	OK OK crk	OK OK ✓	OK OK
OK OK	OK OK x	OK OK x	VEN
OK OK x	OK OK x	OK OK x	OK OK fine edge
OK OK x	crk	OK OK x	OK OK
	crk		NOT OK printed Blk.
83 %	50 %	83 %	NOT Chips Edge printed
25 %	25 %	58 %	66 %
			31 %

1249 E

Blanks 4 Rounds
Schedule bring Blanks up To 600 lbs pressure COLD. Then put on Steam for 3 minutes, Then Cool.
These 4 rounds run on 1 set moulds – moulds just as clean as when started –

Little Too soft to porous

1250 E. well probably

62 OK –

See Drip ahead
thicker Bar

1250 F

1 Round.

press to 600 lbs COLD.

then, put on steam and

hold for 6 minutes, Cool 10 min

send to Eaton

Moulds clear

Dished			
006	242	232	010
005	248	243	005
010	251	242	009
000	240	234	002
006	245	230	005
000	248	239	009
010	246	224	021
006	245	236	009
010	255	254	001
006	241	237	004
012	243	230	013
009	248	240	008
0066	246		008

8/4/16

1250-E

OK OK x	OK OK crk.	OK OK crk.
OK OK crk.	OK OK crk.	OK OK x
OK OK crk.	OK OK x	OK OK VEN
OK OK crk.	OK OK x	OK OK x
OK OK fine crk.	crk 0 Blk.	OK OK VEN
OK OK x	OK OK x	OK OK crked
OK OK x	OK OK x	OK OK crk
OK OK Lev-3	OK OK fine crk.	OK OK x
OK OK crk.	OK OK x	OK OK x
OK OK x	crk 1	crk 0 Blk.
OK OK x	OK OK VEN	OK OK x
OK OK fine crk.	crk 1	OK OK x
crk 0 Blk.		No new rounds used
91%	75%	91%
41%	41%	50%

1250E

4 Extra rounds to be kept to see quality 1st 4

Drop 8 Rounds

3 rounds to be painted —

1 Round Varnished so to be saved to look at

Blanks look good Seamless after Varnishing Very good 1/2 are bad dished + 1/2 flat.

CSI

12/58.1

12/126(105

1251E 1 Round

Blanks Double pressed

Req each except 400 lbs, cooled

Put back + req each 600 lbs —

Dished	after 20 hours
000	007
000	000
000	004 cpp
018	000
010	008
015 —	026
015 —	045 —
000	015 —
000	009
000	000
000	000
005	012
	0105

Warm Cooler

Remember Top + bottom plates are dished in many cases several thousandths

Aug 3/16

When blanks show bright spots on one or on both sides opposite it is probably powder was rammed on or water got in powder this gobbed pieces 1/16 to 1/4" together was loaded & then shows up bright — These spots are soft to the knife — When blank dry & are dirt they look gray

~~Slit~~ The Marquin of Wet & dry sometimes causes a puff out in record, showing a circle around the water changed particle —

Cut 25 Records which had raises implying there was a Dent in the ~~[illegible]~~ mould but found there was a soft spot (water) just under varnish which raised varnish after pressure off — these due probably to spittle mark on blank or spittle or rain spray in powder — one big one was piece of bag fabric = not the mould

Notes

Many times we find a record with 1/8 to 1/4 circle on record the Edges which show puff out which makes it conspicuous.

This is due to a putty like soft combination of Chalk & shellac only = We find these shiny spots on blanks —

This material gets in powder from Dead End in mixer — & the powder probably never went over screens

Spots & marks on blank, or water spray on powder, when near surface will raise varnish up & make knacks & generally as deserved, fibre will do the same also woodpulp without shellac,

Blanks should be inspected for fibre or light colored spots -

I do not think there dant the mould,

1249-E	Dup.		8/4/6
OK Ok crks	OK Ok x	OK OK x	OK Ok x
Raised By WATER	OK Ok x	OK Ok crks	crks
OK Ok x	OK Ok x	Poor Margin	OK Ok
OK Ok VEN	OK Ok x	OK Ok x	crks
OK Ok x	OK Ok crks	crks	OK Ok x
OK Ok VEN	OK Ok crks	crks	OK Ok x
OK Ok x	OK Ok x	OK Ok crks	OK Ok x
OK Ok x	OK Ok x	OK Ok x	OK Ok x
OK Ok x	OK Ok x	OK Ok crks	OK Ok x
crks	OK Ok x	OK Ok x	OK Ok VEN
OK Ok crks	OK Ok crks	OK Ok x	OK Ok crks
OK Ok x	OK Ok x	OK Ok VEN	OK Ok x
83%	100%	75%	83%
50%	75%	41%	66%

1249E — Dup.

4 Rounds

Varnished twice. 1st Var then another brushful + immediately Varnished again, 1 bake

Records show scarcely any dishing - 8/10 flat,

[613]

1252

Hoffman

8 Rounds, —

Duplicate of 1249 but

with ~~latest~~ blank One of

Shellac

4 Rounds to go up stairs.

Has 4 Rounds on hand

1 ½ old mould

OK OK X	OK OK X	OK OK clipped	OK OK
OK OK clipped OK	OK OK clipped	OK OK X	OK OK X
OK OK X	OK OK OK	OK OK X	OK OK clipped
OK OK X	OK OK X	OK OK	OK OK not Vent
OK OK OK	OK OK	OK OK X	OK OK X
OK OK OK	OK OK X	OK OK X	OK OK X
OK OK	OK OK clipped	OK OK X	OK OK clipped
OK OK	OK OK	OK OK Vent	OK OK clipped
OK OK X	OK OK clipped	OK OK Vent	OK OK clipped
OK OK Vent OK	OK OK clipped	OK OK	OK OK clipped
OK OK X	OK OK clipped	OK OK X	No clipped
OK OK X	OK OK	OK OK X	OK OK X
			OK OK X
91%	100%	91%	OK OK
50% perfect	25%	58%	OK OK X
			91% 40%

1253.E

1 Lac blank

Varnish 4 rounds, put on one breechful of Varnish all over & then immediately another breechful - Same as 1249 was Varnished

The blanks are porous.

One bake dry —

Print in New ring moulds

One alcohol & ~~[illegible]~~ 600 lbs Cold & only 3 min press so that OK requires 3½ To 4 min Squeeze —

Surfaces are better than Rags nearly every one has a very light Run out hard for me to tear The 3½ @ 4 min pressure time will be better

138th print is OK both sides = 2 very fine times
In 1 Revolution only found 10 scratches
on 1st 18 lines of music 018 To 040 long
very light = practically no scratches
on smooth part where there are a
thousand on Copper with this many
prints —

Think plated Nickel is evidently
not scratched by putting
on ~~these~~ blanks

Notice very little difference between
2nd print & 138th — same little snaps
are in both & final surface
about same — No new snaps
have come in —

Nickeling seems to be an
improvement — Yes 256th show good
but press mottling
Bad —

~~I notice on the [illegible]~~

256 times — Valse Pathetique OK
Crescendo horrible run out, press mottling
cut out —

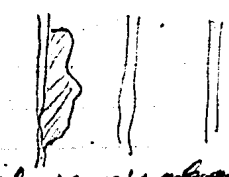
1254 E Press mottling (1E)
amorphous Copper be obliterated
to stop press mottling nickel will
prevent surface wear

Two heavily Nickel plated
moulds — to be put in
a bath & run till
further notice —

Every one sent to Edison

182nd Print — general surface a little crumbly
at start with several big snaps & a big
snap near end — Heavy gouging time —

Valse Pathetique, OK but start kills off —
no scratches on smooth or 1st 18 feed lines except
3 or 4 minor ones — but 1st 18 top of circle
is more mottled than farther in —
One piece Ni pulled off .003 wide .025
long



it wont sound
like is an Hungarian
accent

Nickel is probably an improvement

1255 E

OK OK n.v.old ring X	OK OK X	OK OK X	Cracked
OK OK X	OK OK X	dirtn m	OK OK X
OK OK X	OK OK X	OK OK X	OK OK
OK OK X	OK OK X	OK OK	OK OK
OK OK	OK OK	OK OK X	OK OK X
OK OK	OK OK	OK OK	OK OK
OK OK X	OK OK	OK OK	OK OK
OK OK X	OK OK	wnGr	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK	Dio	OK OK	OK OK
OK OK	OK OK X	OK OK X	OK OK X
OK OK	OK OK X	OK OK X	OK OK X
OK OK	OK OK X		OK OK
11.			
100%	91%	83%	91%
63% perfect	66%	50%	50%

57.2% Perfect, 91.5 general Consol

1255 E

Hoffman 4 Rounds Reg

One Shellac blank, powder

Bring to 600 lbs pressure Cold then put on steam for 4 minutes then Cool. 10 min

Blanks to be varnished all over with one brushfull & then immediately varnished with another brushfull. One bake

To be provided in new square ring moulds

~~filled then~~

1256 E

OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK	OK OK X	OK OK X	1 Cracked
OK OK X	OK OK X	OK OK S	OK OK X
OK OK X	OK OK	OK OK X	OK OK X
OK OK	OK OK	OK OK chip out	OK OK X
OK OK X	OK OK	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK	OK OK X	OK OK X	OK OK X
OK	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	11	OK OK	
100%	100%	100%	91%
75%	82%	75%	91%

97.7 Correct 80.7 perfect

1256 E

4 Rounds Regular. One Checkerboard blank ()

Bring to 600 lbs Cold then put on electric for 5 minutes cool 10 min

Blanks to be varnished all over using one brushfull immediately followed by another brushfull — One bake

To be painted on new square ring moulds.

[71]

1st water not counted -

1257 E

Water -		Water.	
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK low	2
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X			OK OK	X
11							
100%		100%		100%		100%	
100%		100%		100%		91%	

	3 min	4	5	6
1257 E	91%	91.5	97.7	100
	40	57.2	80.7	97.5

4 Rounds Dup of 1255 but 600 lbs with steam on 6 minutes Cool 10 min

Two brushfuls Pace

Cor ring manual

SEE 4 leafs ahead

Breakties 20-20-20-20-20-20 only tried 20 drops

1255 is filled clear to Edge
1256 nearly filled
1257 without 1/8 showing the break
some filled but majority 1/8

Calliper for diameter w/thickness	Calliper for highest thickness	Lowest	Dished
004			005
009			flat
017			flat
013	207	198	flat
010	222	212	020
002	214	208	012
006	216	211	025
009	219	213	flat
006	215	214	016
010	214	204	020
009	226	213	
	218	201	098
086	212	203	
	218	214	
	214	208	

Edges fine -
Much better than 1255 & 6 Blanks scheduled of
Break Mandrel shell 6 Each one
Edge - or twice to 3 times required run on cycle 6 Control 3 minutes

1258 E

To Gz Calliper for thick + D values

OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK Low 2	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK Low 2
D in Ckd powdly	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK old + n Ring X	OK OK X
OK OK X	OK OK X	OK OK	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	Ckd
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
	OK OK X		OK OK Very low 2
83%	100%	100%	91%
75%	91%	91%	83%
		93.5 85	

~~Kicker up to 1 on Edging~~
~~used 6 on mandrel first 4 mandrels drill 1 cutter used qu~~
~~Blanks much softer than regular cutters~~
1258 E ~~stand up bellow about 1 crack in mandrel~~
~~water put 3 to 4 drops on mandrel they are~~
~~so hard~~

4. Rounds Reg 1 Lac blanks bring up to 600 lbs Cold — then put on steam for 7 minutes, then Cool to room

Print in new square lining mandrels

To Gz Varnished One brushfull of Varnish immediately followed by another brushfull then Bake

Send to Edison

Blank gets too dense + two brushfulls too much makes low spots which are really gas spots

1259-E

OK		OK	OK
OK	OK X	po foodline	OK
OK	OK X		OK X
OK	OK X		OK X
			OK X
OK x	OK X	OK X	OK
OK x	OK X	OK X	OK X
OK x	OK X	OK	OK X
OK X	OK	OK X	OK X
OK	OK	OK X	OK X
OK	OK	OK X	OK low 2
OK	OK X	OK X	OK X
OK X	OK X	OK	OK X
OK X	OK X	OK	OK X
		OK	
100%	91%	75	91%
58%	75%	41%	66
		89.2	
		60	

1259 E

4 Rounds Use regular
1 shellac powder
Bring up to 600 Lbs Cold,
then put on steam for
8 minutes, Cool 10 min

Varnish with one brushfull
of varnish immediately followed
by another brushfull —
Bake

Print in NCWA square ring
moulds —

Send to Eckman

1260 E

Calliper for thick + thin

OK OK X		OK OK X	
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK	OK OK X	OK OK
OK OK X	OK OK X		OK OK X
OK OK X	OK OK X	OK OK	OK OK X
OK OK X	OK OK	OK OK	OK OK X
	OK OK X		OK OK
		OK OK	
OK OK X	OK OK Ven	OK OK	OK OK
OK OK old rewring	OK OK X	OK OK	OK OK
OK OK X			Ok 6 Bk
OK OK	OK OK X	OK OK X	Ok 6 Bk
OK OK X			
91% 66%	75% 50%	75 33% 76.7 47.5	66% 41%

1260 E

4 Rounds using regular 1 s. bellac powder –
Bring up to 400 lbs + then put on steam for 8 minutes – Cool 10

Varnish with one brushfull of varnish, immediately followed by another brushfull
Bake –

Print on new square ring moulds

Send to Edison

7= Blank schedule Can vary from 5 mins to 7 min without great variation in discards – This will take care of variations in powder

8= in water 40 min surface not harmed on record
ditto 60 " "
" 2 hour " just perceptible –

Grafite is a very bad thing on blanks – grafite gets in grooves & after a while pulls out & makes a bad knock –

Note

Notes on 1257

1257 appears to be the best blank and record we ever had & should be made standard = 4 wood 3 chalk 1 shellac its the strongest, all dropped 20 times without breaking any of the 6 tried

2nd It is easy to Edge. 4 mandrils 6 each Edged with one single edge which is twice as much as regular, & man reports it will do more.

3 The flatest record yet average dishing .098. Highest to lowest thickness average 216 To 208 average variation of thickness 086.

4 100% Consol perfect 97.75

5= Has nearly twice as much varnish, hence better surface – more waterproof – softer not so susceptible to make dents.

6= Blank moulds keep clean & go several rounds without cleaning give high % & no pull outs

(81)

Mix wrong, or wrong ingredients

OK OK	X	OK OK	
OK OK	X	OK OK	
OK OK	X	OK OK	
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X		X
OK OK	X		X
			X
OK OK		OK OK	X
		V	
OK OK	X	V	
83%		58%	
58%		33%	

Run thru factory quite a greenhorn - Rivetes keepers
Eye inspection 75% OK Inspection 96.1% Edgar 96.2 —
of 240 — only 10 down previously Edgar = They passed XXX Ella Lake

1261 E

Hoffman —

On ~~Monday~~ Tuesday the 14th

Start ½ leg on regular blanks with new blank press schedule and continue till otherwise notified.
Schedule = Put on 600 lbs COL□
Then put on steam for 6 minutes, Cool 10 minutes

These blanks are to be varnished all over with one brushful of varnish immediately followed with another brushfull of varnish Dry + Bake regular

1261 Blanks thus made are all to be printed in new square edge rim moulds. This leg will make about 1200 per day = This output under these conditions is to continue till otherwise notified

Amorphous Copper

324th Run

Start fair -

600th print

Start fair

Its pretty fair - general surface good but too many snap repairs none of them bad or objectionable, but too many for a good record

Off -

Mould of hard Copper -
2 Snaps -

12th surface fair -

36 " better than 12th.

109th = " still better The general surface is very soft & velvet better than any tested for long time - The Mould Originally was damaged bad & they couldnt clean it Had it been a good mould & nickeled it would be perfect. There is many fine snaps but this is due to the defect mentioned

This is a winner

217 prints - good yet surface 3/4 from start. V - balance good -

good yet after 1st inch balance is like ka as seasoned only 75 prints old - all impressions are good & thousands better than have got said off Think it should run 600 times

Mix of Recovered & fresh alcohol
0.830 Spec should be

Proportions = 1522 blank (1238 F)

Varnish for powder

257 lbs 10 oz TN Lac 5 lbs Extra for dust
900 lbs Alcohol
1.3 lbs Para 583.2 grms

Each batch in mixer consists of

57 lbs Wood
43 " Chalk
2 " Lampblack
102 lbs

The above amount of Varnish will make 18 batches of 102 lbs each -

Total 2065 lbs

50% Wood
37.5% Chalk
12.5% Solid Lac

This is 4-3-1 Lac

MH Dia - Moulds

41 - Bruise — Piece sand 026 -

50 Bruise — Tack in blank

51 Dent = 4 big knocks 1/4" from feed line

52 = Dent = Chip in mould 1/4" from feed line

53 - Dent = 18 Prints 2 Dents 1/4 from feed line

54 Bruise - 42 prints - 3 big injuries - Dunniddie found it was mould that leaks

55 Breakle - 63 prints. Nothing on opposite side - tried to repair - NG

56 - Dent = 11 Prints - Tack in blank

57 - Dent - 3 prints - Big piece 3/16 dia white. Cement or quartz. Milky - some part frantic

58 Dent = 72 prints 1/4 from feed line

59 - Dent = 3 prints - 1/4" from feed line

60 - Too Crackly = Its Crackly but this is based on 1st print which is questionable probably 3rd print would show mould was OK

61 = Dent = Big dent radiat stars in smooth - gloss 1/4 in magic 1/16 wide think mould is uninjured -

62 = Bruise = 115 Prints - Quartz - milky 3/16 dia

63 = Dent = 28 prints 1/16 from feed line 020 wide 1/4" long

64 - Breakle - big - Clamp fault

65 - Dent - 36 prints 015 X 1/8 long on feed line

66 - Bruise = a tool or steel has scraped mould bad 1/2 long 030 wide

67 = Label scratches in cleaning - 154 records - should not have been discarded

68 = Big hole = 3 prints - Celluloid defect -

69 = Dent - 29 prints, sounds are weak 3/8 from feed line - should not have been discarded

5147]

70 = Hole + Dent = 40 Prints - hole .020
Sand -

71 = Dent - 3 prints Big Chip $\frac{1}{8}$ x 3/16 - 3/8
from feed line -

72 = Bruise = 13 prints, something
dropped on it.

73 - Dent - 50 prints - small, $\frac{1}{8}$ from feed line

74 = Dent = 217 prints long narrow
dent .020 wide. 3/8 long across
feed line at an angle - clearly a
shoe from piece out

75 = Crape = 40 Prints. Dark
with Moved lock lever

76 = Dent = 79 prints. $\frac{1}{16}$ from feed line
1/16 dia -

77 = Hole - 3 prints - hole in Celluloid

78 - Bruise = 116 prints - Dented
probably by moved lock
both sides alike -

79 = Bruise - 43 prints - .025 @ .030
Sand particle or metal

80 = Knocks + Crackles = Record shows
Crackly but moved should not be
discarded from Sample Record

81 = Loud Surface = 121 prints -
Wrongfully plated - should have
reported - Run Out + Snaps
Also moved discarded from sample
record Thereafter record
moved not shows Run Out +
probably also snaps -

82 Dent - 7 prints fine shoe $\frac{1}{4}$" from feed
.010 wide 3/16 long

83 - Bruise = 38 prints - piece sand or metal forced
in + moved, parallel to Music lines

84 = Big Hole = 99 Prints - Puzzle, 2 holes, sharp Edges looks as if metal Chipped out, no metal displacement -

85 Roughcut Steel = 3 prints - Think Mounted OK - Run Out on 2nd print worse than on 3rd - 1st mounted rough

86 - Rough surface = 122 prints - good surface, should not have been discarded

End of 7th day
45 Discards

8th day Discards -

87 - Dent = 95 prints .030 X .060 1/8 from feed line

88 - Buckles - 7 prints - dirt on holder Clamp fault.

89 - Buckles = 9 prints - dirt on holder - Clamp fault

90 = Crackly = 25 prints only 1 print sent. bad surface correct

91 = Dent = 194 Prints 1/8 from feed line

92 = Dent = 43 prints 3/8 "

93 = Dent - 65 prints 1/16 @ 3/32 piece 1/16 feed line

94 = Dent - 26 prints 1/8 wide 5/8 long clamped 1/16 in smooth part at angle 25° to mine - the piece is in the blank - it was so large it actually Cracked blank

95 - Discard for Mottled surface - Bad scarf

96 = Dent 48 prints 1/32 from feed

97 Dent = 38 prints 3/16 from feed line

98 - Dent 3/8 from feed line

99 = Hole - 53 prints - grit .020 dia

100 - Black hole = 3 prints - Defect in plating dirt or bubble in Copper

101 - Bruise 161 prints, Think it drove to lock pin - .030 long sharp Cut

102 - Mottled surface Cracks 184 prints Bad surface

103 - DEnt = 81 prints 1" from feed line

104 = Bruise - Clean cut, metal cut it - has a radii, its Either pin or lock lever

105 - DEnt = 120 prints 7/8 from feed line

106 = Hole Too large to scrape - 46 prints - 3/8 from feed line - Dis -

106½ DEnt = 266 Prints = 5/8 from feed

107 Hole = 62 prints - plating defect

108 - DEnt - 18 prints - ¼" from feed line .030 X 1/10 inch

109 - Scrape - 51 prints = long scrape very narrow .010 - 1" long

110 = Poor Label, Cracked + Eccentric = 255 prints - its Crackly + 5 Eccentric Discard

111 - DEnt = 61 - prints 5/16 from feed

112 DEnt = 143 prints - Sliver 5/8 from feed line angle 30°

113 - Bruise - 18 prints Sand or metal .018 X .036 Parallel with music

114 DEnt = 245 prints 3/8 from feed line .020

115 - DEnt 54 prints 1/8 from feed .020 X .060

116 - DEnt = 27 prints 1/16 from feed .030 round

117 DEnt - 31 prints - 7/8 from feed 1/16 dia

118 = Injury - 83 prints - Sand particle

119 = Bruise - 44 print Tack in blank

121 - Cracked 148 prints - Bad surf

120 Bucked - 40 print - Clancy - dirt on Mould holder

122 Bruise 117 prints Long scrape Chatter 11 11 11 11 Junk Mould holder struck bottom Matrix

123 - DEnt 101 prints big chip 1/8 X ¼ - 1/8 from feed

124 - Porous Spot - 61 prints - Porous plating defect

End of Dis

39 Discards

Discards on 9th =

125 = Cracky - 85 prints - This mould should not have been discarded - a duplicate of Glass here but another number is many times worse & is allowed to run right along

4744-C-7-111 — 126 - 228 prints - 5/8 from feed 1/16 round Dent.

127 = 2802-B-4-29 - Dents - 5 prints, 2 big dents 1/32 x 1/8 on feed line right angles one 1/16 @ 3/16 dam 1/8" from feed line - Has operated several months

128 4277-C-7-24 - Surface Knocks 170 prints = 5 big scraps but its due to piece Condensate sticking to mould Shows Runout quite bad but this is in the Specific Blank & he should have tried another Blank, only 1 sent when I asked for 2

129 = 4721-C-3-5 = 170 prints = Surface Knocks - Bad surface - old mould holder first 1/2 inch scratched up bad. tops arch flat

130 = 4692-C-2-12 - 83 Prints Bruise = Round dent - Lock pin on Center pin edge

131 = 1285 B 30-37 - 126 Prints DENT Chip 1/16 x 1/8 - 1/2 from feed line - old mould —

132 3655-B-6-61 - DENT. new mould, 99 prints = 020 x 1/16 1/16 from feed

133 = 4311-C-2-64 = New Mould, 53 Prints Shows radial 020 3/16 long at feed line -

134 = 4173-A-33 - old mould - 109 prints Shows - 020 3/16 long 1/4 from feed line -

135 4745-C-4-20, old Mould - 44 Prints 2 dents 3/8 from feed line - 1/32 x 1/8 the other 030 round

136 = 4374-A-1-83 — old Mould : 93 Prints tried to repair = its very small - Should not have been discarded hardly noticeable dozens of moulds running have as bad,

137 - 4037-C-2-64 inside old 1 new on new side where Dented 1 2 pieces 1/4 apart 1/4" from feed 1/16 dia about.

138 - 4154-A-1-34 = New mould side — Dent new mould side — big splint in surface 1/16 wide 5/8 long 5 5 1 of 1/32 1/16 from feed

139 = 4402-C-4-48 — new mould - Dent. 20 prints Sliver 010 - 1/4 long radial - 3/4" from feed line -

140 = 4460-H-2.58 - old mould - 159 prints Bad -

141 = 2352-C-1-9 - Dent = new mould - 123 Prints, Sliver 5/16 long 1/32 dia - nearly radial 1/2 from feed line - End of 9th 17th

Aug 10. Discard -

142 = 4325-C-3-59 = 99 prints of Dent new mould = 3/4" from feed - 1/32 x 1/16 -

143 = 4106-C-8 - Dent - 205 prints - new mould Sliver - radial - 1/4 from feed 020 x 3/8 long

144 = 4402-C-4-51 = Dent new mould — 15 prints = 1/16 from feed - parallel - Sliver 020 - 1/2 long

145 = 2785-B-3-30 - 44 Prints, old mould Dent Sliver 1/4 long 020 - radial 1/16 from feed

146 = 4745-C-4-7 Bubble in repairing - new mould - hardly bear it should not be discarded -

147 = 4382-A-1-7 - Dent 33 print new mould. 1/16 round on feed line -

148 = 4460-H-7-1 - Dent - old mould - 3/4 from feed line - 040 round = 54 prints -

149 = 4460-H-7-2 - Bruise - new mould - 38 prints - grit probably - 1/8 from feed 020

150 = 4129-C-7-51 = Steel in blank reported - 96 print = 020 near label -

151 = 4326-C-3-61 - 5 prints - should not be discarded, wrong was on bridge wall not in back of Diamond 5 prints wrong -

162 = 4685-C-41 — 142 prints Dent - new mould - Chip 1/32 x 1/8 - 3/4 from feed

153 = 4588-C-4-180-86 prints Dent
new mould = Sliver 3/8 long .020 3/8 from feed line —

154 = 4168-C-3-327 - 77 prints —
pressed on a metal piece with radius pressed down -

155 = 3894-C-3-15 = Buckle,
dirt on mould holder - Clancys fault,

156 = 3894-C-3-16 = Dent - not on 1 or 2nd print - (New mould) its on 3rd print - 1/4" from feed - 1/4 long 1/16 wide

157 = 4367-A-7-18 - Dent = new mould ring 3 prints - 1/2 from feed 3/32 x 1/32
might work ↓

~~159~~
158 - 4154-A-1-30 - Dent old mould - 174 prints
.030 x 1/8 - at feed line -

160 2951-G-1-22 - Dent = Pinched 16 —
.015 round - 1/8 feed line —

161 = 3555-C-4-22 - Dent = 142 prints — new mould ring - .020 round 1/16 feed line —

162 = 4382-A-1-21 - Dent 101 prints - old mould ring 1/16 wide 3/16 long at feed line —

163 = 4553-B-8-7 = Bruise = 22 prints -
think one mould scraped over other - forgot blank -

164 = 4326-C-3-82 - Dent - new ring 63 prints
big piece forced in blank 1 1/4" from feed 3/32 wide 1/4 long

165 = 3307-C-3-17 = Dent, new ring - 98 prints on feed line .015 round -

166 = 4158-B-40 - Knocks & Cracks 120 prints rightly demanded

167 = 4015-C-67 - new ring - 22 prints .010 x .050 - 3/8 from feed -

168 - 4494-A-5-70 - Dent, new ring - 16 prints 1/2 from feed line - .015 x 1/8"

169 = 2115-A-2-73 — 78 prints - new ring dirt on backer - Bushing leaks probably -

170 = 3911-C-9-8 – 88 prints, old ring Dent
2 dents 7" apart both 1/2" from feed
one 1/8 long other 1/4 long

171 = 3117-C-8-93. Dent – 222 prints old ring
5/16 long 1/16 wide nearly radial – upper end
1/4 from feed –

172 = 4431-B-33 – Dent – 124 prints – new ring
1/4 long – 1/4 from feed – 040

173 = 4477-C-3-117 = Dent 43 prints new ring
Silver 015 – 3/16 long 1/2 in smooth 1/2 in heavy

174 = 2586-A-1-19 – Hole on Marquin
9 prints – looks like Mercury or lead
forced in

175 = 3280-B-2-35 – Bruise – 136 prints
Cartridge what caused it –

End of 10th Aug 33 Discards

7th & 9th & 10 – how

Dents	68
Bruise	17
Surface	10
should not been discarded	10
Due to Blank	4
Hole	9
Scrape	2
porous spot	1
Buckle	7
	128

Discards 11th Aug

176 – injury – 3 prints = sand, 020 – new ring
piece white grit 1/8 @ 3/16 square –

177 – Dent – 101 prints new ring – 1/8 @ 1/32 1/16 from feed

178 = Crackles – 97 prints, Due to very bad
metal, should never have been put on

179 = Dent = 17 prints – new ring – 1/32 × 1/8
on feed line –

180 = Bruise – 393 prints – 4174-B-14
done by metal on blank 1/32 square – surface ok

181 = trouble to repair – 237 prints – repeats –
Showed full scrapes also a rattling surface
Kept on board too long.

182 – Crackles. 180 prints – some bad scrapes
in record – bad alloy, but general surface
fair to good – The more we wash
this the smoother it gets

183 = Dent – 27 prints – 1/4" from feed 020 × 1/8

184 Metal in blank – 61 prints –
Its a Tack –

185 = Porous Spot – 150 prints –
Something in blank ducks –
or a drop of Cyanide – at another place
grit made injury – or bruise – surface OK

186 Dent = 66 prints – angle 40° chip. 1/16
3/16 long at feed line

187 = Mottled Surface – 56 prints – Horn blk surface

188 Bruise – 59 prints – metal pressed dent
in mouth – metal dent mouth – 030

189 = Dent – 1/8 × 032 angle – at feed new ring 78 prints

190 Scratch = 237 prints – should not
be discarded for the scratch near
label as it far away from the
mouth

191 – Bruise – 107 prints – Radius
bruise – done by man with some
metallic – not due to blank –

192 = Mottled Surface – 187 Prints –
This is not what is called a mottled
surface at all + Run Out has got in mouth
from some previous injury

193 = Scrape 192 prints –
Dont sound – Discarded for
appearance, they should have said so

194 = Mottled surface = 107 prints
Why reject for mottled surface after
107 prints – its a little mottled –
ask Condemnito, There is a big
Run Out on a horribly Cracked
surface why 107 prints before
rejection 4721-C-3-30 –
get others from Bad Lum

195 = Porous Spot – 97 prints OK
Real porous spot developed
from use – its in plating +
tried to repair bad spot afterwards

196 = Knocks + Cracks – 65 prints –
after cleaning twice 75% of
surface disappeared, 3rd cleaning
showed some record –
2 or 3 small chips out of
steel could have been
repaired – Condemnito spoiled
on mouth – small dent +
small injury – 1st 18 lines Scratched bad

197 = Dent = 4 prints – 1/16 dia 1/8 from feed line

198 = Dent – Cracks & Knocks 96 Prints –
Dent 3/8 = X 1/16 1/4 off feed line –

199 = Hollow in Repair spot = 107 prints.
small – – Discard =
Day & night discard of 11th Aug
23?

Aug 6/16

Examination of Discarded Moulds

1 = Plateing - dirt on celluloid
2 Big piece blank & dented mould
3 Pin dropped on mould, also scratches.
4 Deep sharp dent copper, Cu flowed, dent by hard metal chip
5 Dent due to chip. near feed line
6 Dent, a chip varnished over
7 Dent
8 Crackly surface 31 prints - Condensite probably bad
9 Dent 3/8 from feed line - bridge walls scored by chip movement flowing
10 Dent 3/8 from feed line
11 Dent. 3/8 " also scratch
12 Dent 3/16 " 3 point chip -
13 Hole 1/8 from feed. sharp edges - looks like bubble in plateing
14 Mechanical injury Cu flowed, looks like piece of grit forced in Matrix. Cu flows longer than wide, has small dent in another part of mould.
15 3/4 from feed line. piece sand forced in Copper
16 3/8 from feed long chip 3/8 x 032 forced into record, found record no var on chip pressing in chip forced excess var to, sides of chip made it more shiny Needle drawn over cuts chip but not record - Dented Matrix.
17 = Report says Rough Crackly - really OK only a Run Out
18 Porous spot marked - Matrix shows serious injury except little rough spot which caused pull outs in Record - Put it back with required spot to be burnished so as to prevent pull outs
19 = Marked Rough Crackly - No so - good Mould should never have been discarded
20 - Bruise caused by piece sand 016 dia
21 = Marked Cracks - 154 prints, its good mould yet & should be put back lots of moulds need running are much worse
22 Dents in blank 2 places 3/4" apart Chip on blank or between blank
23 - Mechanical injury  this shape - Symetrical shape

[169]

24 = 146 Records = pulled off too soon only 2 light snaps noticeable or could be repaired. The others not strong

25 - Reported Rough + Crackly — Not so — good mould 2 Snaps due to pieces condensite sticking to mould, this matrix was never examined + if chips removed is OK

26 Repld Rough + Cracks — Its a fine mould, not rough or any cracks noticeable — should be put back

27 - Reported Surface + Cracks — Surface good — one group of snaps which can be repaired + mould put back

28 = Repld Surface + Knocks — Surface good, only pair of knocks in record + not on mould — should be put back

29 = Repld Scratches + Cracks — only 2 Cracks in a repair spot Scratches about groove should not have been discarded 156 Records — Chip pressed in middle of mould

30 = Repld Cracks — No Cracks — just a very light run out 146 record should not have been discarded

31 = Repld Hard ambalance in blank — Couldnt find it — properly discarded

32 - Repld 3 dents — There are 5 in a group very small — 1/4 to 3/8 from feed line 015 each only gives light dull knocks — (only) record Even if weaker record it could have been repaired + put back

33 = Repld Dent = Dent sounds very weak, I could hardly hear it should go back on board again

34 = Repld Dent = Cant say if it can be repaired — 1/8" from feed line

35 = Repld Rough Surface = Has run out due to grinding Sub-machine wrong — Rightfully discarded

36 = Reptd Rough Surface — 1st print has slight Run Out 3rd print absolutely OK.

37 = Reported Buckle = Assembler left lot pieces in — Clancys fault.

38 = Reptd Dents — Discard — OK

39 = Reptd Dent from Chip = OK = Big chip in second, Chip angle of 30° 1/16 wide 1/4" long 1/8 from feed line

40 = Reptd Dent in separator opat, Discard OK — 3/8 from feed line = 3/32 Dia round

41 = Reptd Dent = 1 1/4" from feed line 020 wide 3/8 long slight angle from parallell The dent is too weak to discard mould —

42 — Discarded for 2 black holes — holes in mould — filled with Condensate sticking up felt with finger — Discarded OK

43 = Reptd Buckles — Dirt on holder Clancys fault.

44 = Reptd buckles Dirt on holder Clancys fault but sound too weak to warrant discard — 4 pcs

45 = Reptd Deep holes 72 prints — Discarded OK

46 = Nothing on Card — Hole produced by piece sand 020 —

47 — Reptd bruise = Middle of music 028 dia Slightly Dec

48 = Reptd Cracks 133 prts = Chip in second 1/8 from feed line should have been discarded for Dent moulds has Crackly surface

See back

11 pages

Examinations for density, as shown between on Record

1 – Fibre-bag
2 Water spot
3 " "
5 Red, wet spot
6 grafite, wet + black
7 Wad of pure grafite
8 Water Spot
9 Portland Cement
10 Water Spot
11 "
12 fibre from bag

Moulds not required

Girls employed Disc Dept
214 mostly 15c some 17½

Varnish	59
Oil Hanks	6
Printing	1
Sorting & cards	5
Eye Inspect	8
Machine test	6
Edge Inspect	4
Mould test	9
Numbering, Sorting	11
Final-Wrap-Inspect	60
PB Inspector	6
Matrons	3
Office	5
	183

Mould Repair room	21
Celluloid Pressing "	5
" Dip "	4
Clerk	1
	31

	Discard Dents	Many Cracks	Record per Mould
July 25	35	41	105
26	38	27	87
27	43	19	100
28	60	23	90
29	56	29	83
31	17	23	101
Aug 1	78	49	82
2	37	47	99

Inspectors Reports

July	Comcl	Perfect	Ven Pullout	Rounds	New M Rec	New M Bad	New M %
19	92	66.9	15%	20	20	none	
20	88	63.2	17	20	50	"	
21	93.9	66.8	14	50	95	"	
22	93.3	56.6	20	40	70	1	
24	89.57	55.3	37.5	60	102	2	
25	90.27	59.2	34.5	60	104	1	
26	86.8	48.7	39.1	60	105	4	
27	92.6	58.6	34.3	60	127	6	
28	93.4	59.5	33.6	60	145	3	
29	94.6	56.3	26.5	55	111	0	
31	93.1	56.7	34.5	60	132	2	18%
Aug 1	90-	70.67	23.19	60	242	1	33%
2	93.6	70.5	22	60	201	2	27%
3	89.9	58.2	30	60	146	7	22%
4	90.8	50.5	30	60	183	4	25.4
5	91.36	57.74	30	51	193	1	31%
7	93.4	62.6	28	60	236	2	
8	92.5	46.1	46	60	281	11-	39%
9	91	67.6	26	60	337	5	46
10	92..	56-	30-	60	322	6-	44
11	93.6	48.6	40	60	365	5	50
12	94.1	46.1	44	60	297	5	40
14	93.9	51.	40	60	374	2 Dia Ven 6 Com- "	50%
15	95-	49	45	40	281	2 Dia Ven	50
16	91.6	41	30%		115	00	24%
17	91	53.5	30-		225	1 Ven 1 Dia	47

Drop Test.

July 11	12-6-9-4-8-6	45	
12	20-4-6-5-10-20	65	
13	2-8-17-2-13-13	55	
14	15-5-5-8-1-9	43	
15	2-20-20-8-2-20	72	
17	20-10-20-1-20-19	90	
18	9-18-3-20-12-1	63	
19	12-7-19-20-2-10	70	
21	20-3-1-9-13-7	53	
22			
23			
24	8-14-20-2-5-20	69	
25	20-3-12-20-4-9	68	
26	10-11-9-5-7-20	62	
27	20-15-8-3-20-20	86	
29	18-7-20-10-3-20	78	
Aug 1	20-20-2-14-18-20	94 x	x Excess of new Mixed Hands
2	13-3-3-5-3-7-	34	
3	9-2-7-2-20-6-	46.	
4	16-7-2-19-20-18	82	
5	20-20-20-20-3-3-	86	
7	18-20-7-20-13-20-	98	
8	10-18-3-1-20-16-	68	
9 =	3-7-18-20-13-9-	70	
10 =	7-19-20-20-20-13-	99	
11	18-3-20-10-9-16-	76	
12	20-10-9-3-19-16-	77	
14	12-20-20-7-18-16-	93	

Blanks made

July	19	15371
	20	14747
	21	
	22	
	23	
	24	9378
	25	12755
	26	14350
	27	14659
	28	16473
	29	14691
	31	12612
Aug	1	16245
	2	16296
	3	17343
	4	17635
	6	15256
	7	16209
	8	18039
	9	14248
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	18174
	18	19220
	19th	9107
	21	13390
	22	13706
	23	13146
	24	10254
	25	11312
	26	7822
	28	15602
	29	17066
	30	17594
	31	17741
Sept	1	15126
	2	{Shut down. Saturday}
	5	15626
	6	16514
	7	17183
	8	13076
	9	7914
	11	18314
	12	19478

Record to Baldwin

June 20	7651	July 22	5427	21st 8150 - Nov 6	
21	5571	24	5089	22	9391
22	6247	26	5587	23	10772
23	3968	27	3898	24	11054
24	5230	28	5256	25	12097
26	7166	29	5236	26	11073
27	8838	31	4481	28	11442
28	8465	Aug 1	5978	29	10785
29	9638	2	6117	30	13334
30	10169	3	6161	31	10807
July 1	9285	4		Sept 1	11822
3	9562	5		2	9548
5	9101	7	5579	5	12057
6	9055	8	6247	6	10746
7	9133	9	7125	7	13395
8	7105	10	8089	8	10642
10	9031	11	9287	9	10041
11	6066	12	8126	11	10605
12	7149	14	9309	12	13128
13	6137	15	10065	13	11994
14	7639	16	10071		
15	5080	17	10075		
17	7006	18	8881		
18	4132	19	10696		
19	5127				
20	5138				
21	2797				

New Mould holes
used by Clancy

old rings I turned down
so can use without lead

July 1	8			
3	5			
5	14			
6	10			
7	14			
8	10			
11	12			
12	13			
14	9			
19	26			
20	15			
21	15			
22	14			
25	12			
26	24			
27	23			
28	19			
29	11			
31	—			
Aug 1	24	Total 263		
2	51	314 — Clancy says	344 + may have few more	
3	43		387	31%
4	41		428	34.2
5	26		454	
7	33		487	38.8 %
8	50		537	43%
9	42		579	46.3
10	38		617	50%
11	51		668	53.4
12	21		689	55.2
14	43		732	44

Reee 18 book

10811) 80520 (7.4.4
75677
48434
43246
5188

8848
936
53088
26544
79632
82817
10811 —

8281
229
8052

5156
3683
9
8848

34
540
136
10
17
18,3
8579
38
617

18300
95
1500
1500
12810
1371

275
579
854

Aug 2/16
Blank Schedule

5 min Contact
3 " 600 Lbs
8 " Cool-

[ITEM(S) FOUND IN BOOK]

June 19. 1916

Mr. Edison,

Sir,

Would you be disposed to give me an increase in my salary, At my age and with my experience I feel that I ought to be earning more than I at present receive. Perhaps, when you take into consideration the fact that I have been in your employ four years you will not think this an unreasonable request, and be inclined to grant it. I need not say that in any case, while I remain with you, my best energies will continue to be as they have hitherto been, devoted to your interests.

I remain
Yours obediently
J. Miller

[ITEM(S) FOUND IN BOOK]

Mr Edison I laid out
Four diff style Automatic Varnishing
Machines the last is very simple
and will not cost much to make
up using all the parts of Hand
Varnishing Machines, One Girl
can turn out 2.100 in ten hours
easy, I think 7 of these Machines
will give an output of 15,000 Disk

June 26. 1916

J F Ott

[ITEM(S) FOUND IN BOOK]

Mr Edison

[ITEM(S) FOUND IN BOOK]

September 12th, 1916.

Mr. T. A. Edison,

13128 - #1522 Brushed Blanks delivered to stock.

Rejected - New Process

Spots	11	
Scratched	51	
Cracked Edge	1	
Chipped Edge	21	
Poor Print	2	
Bad Centers	3	
Cracked Centers	1	
Wrong Combination	7	
	97	Total.

GHB/AMO.

G.H.Baldwin

[ITEM(S) FOUND IN BOOK]

September 13th, 1916.

Mr. T. A. Edison:-

11994 - #1522 Brushed Blanks delivered to stock.

Rejected - New Process

Spots	12
Scratched	32
Dents	1
Chipped Edge	4
Pin Holes	1
Bad Centers	7
Cracked Centers	1
Wrong Combination	1
Powr Print	2
	61 Total

G.H.Baldwin.

GHB/AMO.

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 18
Notebook, N-16-08-12

This notebook was used by Edison during August-September 1916 for notes on experiments to improve the surface quality and the durability of Edison disc records. There are also notes by William W. Dinwiddie, Archie D. Hoffman, and other experimenters, possibly including Joe Miller and Sherwood T. (Sam) Moore. The entries at the beginning of the book include a list, continued from Book No. 17, of flaws observed in discarded record molds numbered 200-352. Other notes describe a sequence of experiments numbered 1262E through 1307E. Included are tests involving different varnish compounds, variations in the methods of applying the varnish and in the amount of heat and pressure during baking. Also included are entries involving experimental lots of records made with differently constructed or "loaded" record blanks. Flaws and successful results are both noted. At the end of the book is a summary of inspectors' reports, along with notes on labor costs and piece rates and lists of mold "holders." Some notes are in the form of instructions to Hoffman or Dinwiddie. Inserted into the book are several loose notes by Dinwiddie, including descriptions of experiments 1444E-1466E. The front and back covers are labeled "18." The pages are unnumbered. Approximately 150 pages have been used.

Rejected Discarded Moulds

reason for discard.

Aug 12th

Night & Day —

200 — Scratched Label = 27 prints = Bad —

201 = Scratched Label 10 prints — Bad

202 Scratched Label 10 prints Should not have been rejected,

203 Stain — 296 Prints = Should not have been rejected = 2 snaps are in one due to injury to mould but loudest is piece of Condensate stuck on both repairable —

204 Dent — 59 prints New ring 3 dents ~~[illegible]~~ Record powder - at feed line —

205 = Dent - 34 Records — 1/8 of feed line

015 X 030 —

206 - Bruise - 228 Prints Bad - Miller says its done pulling in the trick =

207 - Mothed Surface 86 Prints - its a different working mould than the other - Must be bad submaster - Why 86 prints before discarding Has very bad Run out after start =

208 Bruise - 114 Prints - Bad Cant say what cause it -

209 = 2 long scratches - 320 - bad

210 = Big Hole - 66 prints - hole 065 dia in track - deep - Cant be repaired Bad

211 = Feather Stain = 194 prints - Bad - shows feather in Record Nothing on mould

212 = Buckled Holder = 145 prints - pin dropped from holder above in press man didnt see it + pressed it in

213 = Bruise = 173 Prints - Bad.
Matte bruise Contrary what caused it

214 - Porous Coat = 145 prints =
its probably a loose coat there is
vapor on it there & it looks OK
but Develops loud -

14 only End of Aug 12th Moved Dis.

Aug. 14 Discard Moulds

215 = Mottled Surface = 633 prints,
Evidently got mottled by use above
Discussion - it has snaps
PHENOMENON = The lines are zig zag
based secon

216 = Mottled Surface 548 Prints
Very bad surface - loud secon
should have been discarded long
before - Think should limit to 300
Smooth part next table shows
hundreds of small dents besides
Matte -

217 = Dent = 60 prints .015 round near feed
old mould -

218 = Dent, 156 Prints - old + new ring on new side

219 = Dent = 100 prints old ring - 1/16 off feed
.020 X .060 -

220 = Dent - 201 prints new ring = 2 dents
1/4" feed line - small

221 = Dent = 122 Prints = old ring .010 x .060 off feed

222 = Dent = 90 Prints - old ring = 2 sides by side
1/16 dia off feed

223 = Dent = 41 Prints new ring 1/16 1/8" from feed

224 = Bruise - 78 Prints = new ring

225 = Dent, 67 Prints new ring 1/32 - 1/2" off feed

226 = Stain = 83 prints - Record looks
Very bad =

227 = Bruise = 113 prints = old mould
Due to cleaner = worn - new man
probably

228 = Dent = 15 Prints = old ring =
015 round dent 1/4" feed line -

229 = Bruise - 153 prints old Ring -
grit 025 -

230 = Dent - 267 Prints new ring -
Sliver 020 3/8 long across feed line -

231 = Dent = 136 Prints - old ring - 1/8 dia
1/4 from feed line -

232 = Dent = 83 Prints - new ring -
2 dents 6" apart, sliver 1/16 dia -
near feed

233 = Dent = 148 Prints new ring Sliver
015 @ 1/8 long near feed -

234 = Bruise - 61 prints - new ring -
probably grit -

235 = Dent = 134 Prints New ring
Sliver 030 3/8 long 1/4" off feed

236 = Dent = 91 Prints = New ring =
1" from feed .015 x 1/8

237 Dent = 150 Prints - Old ring =
Stress .020 by 3/8 long starts at feed

238 = Scrape = 117 Prints = New ring
bad

239 = Dent - 406 Prints New ring -
Surface fair =

240 = Bruise = 4 prints = Is a
scrape =

241 = Dent = 191 Prints = new ring 1/2"
from feed .032 1/4" long

242 = Dent = 43 Prints - New Wound
at feed 1/16 dia

243 = Dent = 108 prints, old ring
should not been discarded

244 = for sound in wound - worn out
188 prints = should have been
discarded for run out (big) & bad
surface - probably very worn Copper
18 Rings all changed up

C117

34 Ducardo 14th Aug

Mottled	2
Dent	22
Bruise	5
Stain	1
Scrape	2
Worn out	2
Buckle	1
	35

22, Dents 13 Miscellaneous

245 = Ducardo for Sound in mould worn out
The opposite side of 244 =
to OK Ohanco. not have
been accurate 188 prints
same as 244 —

246 - Dent 143 Prints - old mould
very small dent near feed —

247 = Scrape 171 Prints = new ring

248 = Dent - 36 Prints. old ring -
020 x 1/16 at feed line —

249 = Buckles = 112 Prints = no sign of
dent on opposite side
34 Ducardo —

OK		OK
OK X	OK	OK
	OK X	OK
OK	OK	OK
OK		OK
OK		OK
	OK	
OK X	OK X	OK
OK X		OK
OK	OK	
OK X	OK	OK
75%	58%	45%
33%	16%	00%

Not loaded

1262 E

Use 1261 E new soft blank.
2 brushfull Varnish

Print 4 Rounds on following

Print Req: Except 750 lbs
for 12 minutes

All Printed full + OK now low
good Edges scarcely any
squirt out between moulds

Mix wrong - or mistake
made somewhere
Moulds dirty

1263E

Dup 1262E

Except 700 lbs pressure

OK		OK	x			OK
OK	X	OK		OK		
OK		OK	x	OK	X	
OK		OK		OK	X	
OK	X	OK	X			
OK		OK	x	OK		
OK		OK				
OK	x	OK	x	OK		
OK				OK		
OK		OK	X	OK		
OK	x			OK		
OK		OK		OK		
		OK				
100%		83%		75%		
31%		50%		16%		

1264E

Dup of 1262. Except 650lbs –

Mix wrong or some mistake somewhere

Stuck to mould, moulds dirty

all but 1 permitted full + that was only slight + was ok

OK X	OK X	OK X
OK X	OK X	OK X
OK X	OK X	
OK X	OK	OK X
OK X	OK X	OK X
OK X	OK	
OK X	OK	OK X
	OK X	
	OK X	OK
OK	OK X	OK
OK X	OK X	OK
OK X	OK	
OK X	OK X	OK
91%	100%	66%
83%	75%	40%

1265E 1

Run three 4 rounds of blanks

(Req) you are now making fresh powder press

Req print a schedule

Use new ring moulds

Send to Edison

This is to see if powder is OK + why 1262 + 1264 didn't work ? perhaps powder is now deteriorated as its made in 47 5 46 batches & I think.

The trouble is in the Powder — worse we have had for 3 WEEKS

OK OK	X	OK OK	
OK OK			
OK OK		OK OK	
OK OK		OK OK	X
OK OK	X	OK OK	
OK OK		OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	
83%		75	
41%		41%	

1266 E

Make 2 Rounds Duplicate of 1261.

Watch Press man to see he puts on the 600 lbs Cold. + then puts steam on 6 min Cool 10 min

2 Brushfulls Vare o use square Edged moulds

Trouble is the powder worse we have had in 3 weeks —

1267E

OK X	OK
OK	OK
OK X	
OK	OK
OK X	OK
OK	OK X
OK	OK
OK	
OK	OK X
OK	OK X
OK	OK X
	OK
91%	83%
25%	33%

1267.E

Aug 16

Fresh powder right from the Magnet. 2 Rounds

Schedule - Bring to 600 lbs Cold - then put on steam for 6 minutes, Cool 10 min -

Run regular on Printing

Send to Edison

Read points 12 Noon 17 / Aug 16

The powder is really bad 4th test =

Theory all residual Alcohol gone & the Gritte - too old = wants remnants of Alcohol to prevent brittleness -

C313

Discarded Moulds 15th Aug

250 – Scrape – 96 Prints – old ring – Bad scrape

251 = Big Hole – 105 Prints – sorry

252 = Mottle surface = Crystalline Copper unplating
104 Prints – Very bad surface awful –
should have been caught before it got
so bad – This is a serious thing =
Run out Horrible

4373-B-2-10

253 = Substance in Blank – 40 Prints
Red putty = it dented moved although
soft – Strange = 1/8 gr at feed line

254 = Dent – 64 Prints – .030 X .080
at feed line –

255 = Mottled surface 129 prints
Horrible surface horrible
Run Out. 4342-A-1-95 =

256 = Dent = 44 Prints =

257 = Mottled surface 90 Prints
4402-C-4-24 – This is not
perceptibly mottled but has horrible
run out due probably to unusable cleaners
back to Gently mottled + crystalline

got 12 of 262 from Baldwin on
17th all good surfaces.

258 = Dent - 421 Prints - 1/16 near feed
new ring needed

259 = Dent - 129 Prints need ring
.032 x 1/4" long across feed line -

260 = Mottled surface = 181 prints
Rotten surface should have been
taken off earlier = 4402-C-4-24

261 = Dent = 164 Prints = .03 x 1/8 = at feed line.

262 = Mottled surface 220 prints =
Horrible surface 4745-C-4-12

263 = Mottled surface = 107 prints -
Bad horrible surface -
3083-C-3-13 -

264 = Dent - 22 prints - 1/16 - 1/2 in old ring

265 = Dent - 67 prints need ring -
Sliver 1/4 near feed

266 = Dent — 67 prints, ⅛ dia - new running

267 = Scraped = 132 prints - Ivory
of Chromium clipped —

268 = Rough surface - 232 prints —
not very bad - but OK to Cut out.

269 = Rough surface - 232 prints,
not very bad - OK to Cut out,

270 = Bruise - 177 prints = grit -

271 = Margin — 151 prints = old running
w. a bad Dent in smooth & on
feed line —

272 - Mottled surface - 4378-C-5-69
pretty fair not bad,

273 - Dent - 63 - prints, new running
032 X ¼ middle music —

274 = Mottled surface - 73 prints
3080-C-4-48
Bad at End - mottled at a spot
making Run out -

275 = Dent = 130 prints - Neco ring
Sliver 030 by 3/4" long

276 = Bruise - 203 prints =
looks like hole in plating - round
+ Cryolite all over -

277 = Rough surface = 167 prints
OK rough - Mottled by press

278 - Rough surface - Press Mottled,
Mottled by press = 167 prints

279 = Dent - 138 prints. - 2 slivers
+ a point 3/8 long middle minus
Neco ring

280 = Bruise = 136 prints = Damper -

281 = Mottled surface - 143 prints
Bad = Mottled on back.

282 = Dent 156 = prints Neco ring
sliver 032 + long feed line +

Aug 15

Dents	12
Scrape	2
Bruise	3
Hole	1
Molled by Press	9
Roughness	4
Buckle	1
Substance in blanks	1
	33 Discards -

12 Dents. 12 Miscellaneous -
9 wornout

283 = Buckle = 69 pounds -
Chip of Vase on holder
33 Discards -

Orders Aug 17/16

Hoffman –

Only keep 150 bags of ungrounds powder ahead of grinders + 130 bags of ground stuff ahead of screens + Equal to 50 bags ahead of the Moulders

Edson

On 16th – When blanks started come bad

Estimated on hand

40 000 lbs finished powder
40 000 " ready to grind
80 000 –

Blanks ready for Varnish	2 800
" Varnished	13 000
" Edged	21 500
" Varnished on 2nd Floor	3 500
" New from Hoffman	1 900
	42.700

127 000 blanks –

1268E

		OK OK	X
OK OK		OK OK	
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK	X		
OK OK		OK OK	X
OK OK	X	OK OK	
		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK		OK OK	
		OK OK	X
83%		91%	
50%		50%	

1268E Aug 17/16

4 Rounds Drop of 1261E

2 brass fuels —

~~[illegible]~~ 11 are —

Sent to Edison

It's the 17th Aug

Blank —

1269E

OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	
OK OK		OK OK	
			Ck & blank
OK OK			
OK OK	X	OK OK	X
91½%		83	
66%		66%	

Drop lead
5-14-9-20-2-20

1269E

2 Rounds of 1261 blanks

600 lbs Cold, then steam for 6 min — Cool 10 min.

Print on following schedule

~~[illegible]~~ put at contact needle off pin — When temperature reaches 225 deg fahr put on 750 lbs pressure & hold for 12 min Cool ~~[illegible]~~ Cold —

Send to Edison

The 17th drug powder is really bad

OK	OK
OK X	OK
	OK
OK	OK
OK X	OK
OK	OK
OK X	OK X
OK X	OK
OK	OK
OK X	OK
OK	OK
OK X	OK
OK	OK
91%	100%
50%	8%

1270 E

Take fresh powder from Dryers put in Cans – When Cool Enough Run thru Crushers + screens + take several rounds right away – make blanks.

1261 Schedule – ← ////

To have 2 Crushfull Varnish

Print 4 Rounds

Powder still bad –

probable trouble is oxidation of Lac

Regular schedule Blanks—
Reg Var 1 Crucible full—
1 1/10 Lac pounds

OK OK	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X
OK OK	OK OK X	OK OK
OK OK X	OK OK	Ven
OK OK X	OK OK	OK OK
OK OK X	OK OK	OK OK
OK OK X	OK OK	OK OK X
OK OK	OK OK	OK OK
OK OK X	OK OK X	OK OK
OK OK	OK OK X	OK OK X
91%	91%	91%
58%	58%	41%

1271 F

Make up Vac Dryer full of Mix 4-3-1 1/10 Lac—
When done put in Cans with top on— When cool enough Grind, Cool + Screen & make up into blanks at once—

Have 1/2 of all the blanks run on 1261 schedule + 1/2 regular schedule—

Send up stairs to Kercher to Varnish with 2 Crucible full ~~the~~ 1261 blanks + Reg Var the Reg blanks—

Print all— but save 4 rounds Each 1261 + Reg + send to Edwin

New Blank

1271E But blanks made with 1261 Schedule + 2 Grumbfulls Var — made at same time as Reg on other side —

1/10 Lacquered

OK OK X	V	OK
OK OK —	OK OK X	OK OK X
OK OK X	OK OK —	OK OK X
OK OK X	OK OK X	OK OK X
OK OK —	OK OK V	OK OK —
OK OK X	OK OK X	OK OK X
OK OK —	OK OK —	OK OK X
OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK
OK OK —	OK OK X	OK OK —
OK OK X	OK OK X	OK OK
OK OK X	OK OK X	OK OK
	OK OK	OK OK
100%	91%	83%
66%	58%	50%

Test Run of Mix for 1 week ahead — time required

24 hours for one dryer full

Hoffman Thinks Can do it in less — Saturday we Could make test — + Know that following week our mix would be OK + what we had to do to make it OK by changing shellac Etc =

1½ hour to mix
1 " load
3½ " dry
½ " unload
1 " standing to cool
8 " cool in Cans
1 " grind
8 " cool after grinding
Screen + make blanks

Discard Moulds Night & Day
16th Aug -

284 = Worn Out - 394 prints discarded by orders - 300 maximum times - Very good surface, could have been run longer but 300 perfects is enough shows 003 crystals on back but pretty good surface on back

285 Worn out - opposite side of 284 - This is better surface than the other two sides at about not bad - balance surface VV - 300 at least is safe if not mottled on back - Crystallin on back even 002

286 = Bruises = 154 Prints - grit in between

287 Dent = 217 prints = nice run Sliver 1/4 long at feed Mottles on back 003 & larger about middle music

288 = Cracklets = 117 Prints - rather mottled on back - Off =

289 - Mottled - 190 Prints -
Very Mottled (bad) on back of
mould - Bad Run Out -

290 = Bruise = 263 prints -
Back fine grain -
Cause of injury Mould holder
dropped on it big injury

291 = Buckle = 95 prints.
fine grain back - Thin - VV surface -

292 Bruise - 80 prints = Edge of
mould holder struck it Mottled
some & very dirty on back.

293 = Mottled surface = 152 prints
Bad mottle on back. 003 @ 005 -
Bad run out -

294 = Dent, = 34 prints - old ring
Very good back - Ott =

295 = Dent = 84 prints =
good back = Ott -

296 = Porous Spot = 111 Prints =
Dont think showed 6x discounted
~~[illegible]~~.
297 =

See further on

Notes on Temperature of
Blank Powder

Mill down 2 hours to cool -

after starting up temp of
powder taken at discharge
pipe from grinder 130° Fahr

When Mill is hot temp 168° Fahr

Temp powder after passing thru
Conveyors + Elevator 110° Fahr
from Cold Mill +

128°F from Hot Mill -

1272E Req 1 Lac powder
1 Lac -

	OK X	OK	OK
OK	OK	OK	OK
OK X	OK	OK	
OK	OK	OK x	OK
OK			
OK X	OK	OK	
OK	OK	OK	OK
OK	OK	OK	OK x
OK	OK	OK	OK
OK	OK	OK	OK x
OK	OK	OK	OK x
OK	OK	OK	OK x
OK X	OK x	OK	
91%	100%	91%	75%
25%	16%	8%	33%

1272E

Temp powder 135°

Cool grinding Mill down then take some powder run it through to get enough for 5 or 6 Rounds & before powder gets Hot, Stop Taking powder when it gets too ~~hot~~ hot — put Thermometer in powder as it come from Crusher to see how hot it get, Make 4 Rounds 1261E Schedule & send up stairs note of your Moulds Keep clean

Continued

1272 E

1272 E Cold powder
4 Rounds –

Two brushfulls –

Print dug send to
Edison Rush

298 = Mottled Surface 117 Prints
mottled 003 on back as you approach
label = Wrong designation —
Shows be numerous snaps &
bad run out starting a little
ways in —

299 Rough = 214 Prints on back
fair but middle music much
003 — Wrong designation —
Surface is OK for this kind of
record & only one snap
that needs repair near
End — The start is little
rough. but 1 or 2 snaps
could have been repaired

300 = Mottled Surface = 172 pts
back a little mottled fine specks or some
dirt — Bad run out —

301 = Mottle surface - 259 = Prints -
On back pretty general mottle 003
Some run out roaring surface
Some dull knacks 16 lines -

302 Rough Surface - Serapis -
Smooth back - 246 prints -
Should not have been discarded

303 = Crackels - 285 prints back not
mottled = Cano Home = Is little too
rough surface for high class
record - Quiet Spots.

304 = Mottled - 258 prints Back is
very strong mottled 004
Rough general surface.
" " due to 004 mottled

305 = Mottle surface 193 prts. back pretty
good - general surface rather
hard

306 = Mottled - 83 = Somewhat mottled
on back - 003 - Run out bad -
weak Violin

307 = Mottled = 97 = points - back is
Mottled - looks like Checks & are bad
Bad Run out —

308 = Rough - Crackly = 168 Points
somewhat Mottled on back -
might have done 10 or 20 more
not very bad —

309 Mottle Surface = 142 pts - Smooth
back - Run Out in Segmaster
This is 2nd one - notified Dunnidie

310 =	Dent	- 95 pts -	new ring
311 -	Dent	173 "	"
312	Bruise	190 -	Something dropped on Mary
313	"	166 -	grit.
314	Dent.	102	new ring
315	Dent	307	old ring
316	Scrape	353.	Done by Cleaning Tool
317	Dent	58	new ring
318	Dent	187	"
319	Bruise	104	grit
320	Dent	195	new ring
321	Bruise	136	done by Sharp tool

16th –

Dents	12
Bruise	10
Surface	16
Buckle	1
Porous Spot	1
Scrape	1

322 = Bruise 211 pts, something in block
323 Dent 59 " Necessary
324 Dent 145 – "
325 Bruise 377 done by cleaning Tool
326 Bruise 193 something in block

Discarded Moulds 17th Aug/16

327 = Surface Spotty + Crinkly – 291 prints
back only little pitted –
Worst as far as it showed

328 = Mottled surface – 237 prints
Back badly pitted fine – .003 –
Continuous bad surface –

329 = Mottled surf = 216 Prints
Back moderately Pitted =

330 = Mottled = 216 pts Back mottled
surface very bad

331 = Mottled = 344 pts – Back fairly Mottled
.002 – Slight Run Out rough
surface

332 = Mottle = 286 Prints = Back very fine mottle all - Rough surface -

333 Crackly surface = 511 pts pretty good back = Bad surface -

334 = Rough surface - 397 pts Back - Mottled Concentrated in middle Rough surface

335 = Spilly + Shape - 275 prints - Back Mottled - slight RO surface bad

336 Mottled - 261 pts - back pitted Bad Run out & Crackly

337 Mottled - 256 prints - Back slightly mottled - Bad Run out

338 Mottled 145 prints - back good - Run out

339 Mottled 287 pts - back has fine mottle - surface Cracks & Run out

340 Mottled 232 prints – back good – Run Out –

341 = Mottled + Spotty Surf – 272 prints back good – light Run out, fair surface – Spotty –

342 Mottled surface – 272 pts back Mottled – Bad Run out Land surface

343 Mottled – 152 Prints – back good – Run Out + rough surface

344 – Rough + Crackly – 218 pts surface rough + crackly Bad run out

345 – Mottled bad + Crackly – 170 pts Light Run Out – surface good

0021

1916

Surface –	19
Bruce	4
Dent	2
Buckles	1
	26

346 = Bruce – 3 prints = something in blank

347 – Dent 179 prints – recess ring

348 = Bruce 20 prints something dropped on

349 Buckles 37 prints –

350 – Dent 115 "

351 Bruce 112 pts grit

352 Bruce 96 pts

1272E

100%	91%	100%	100%
83%	33%	56%	83%
			97.75
			64.2

1272E X

Duplicate of 1272E

But grinding Machines cooled over Sunday & powder will be much colder —

Powder from Mill only 80° Fahr instead of

~~136° Fahr~~

1272E was 136° Fahr

80° deg 97.75 Com 64.2 perfect when loaded

136 deg 89.2 Com 20.5 perfect. when loaded

8-22-16

	Temp	
Started 830	106	Steam on
9 am	106	"
10 "	104	"
10.15	126	Steam off
1030	126	Water on
1045	125	Water Off
11 am	124	"
11 30	134	Water On (Shut off Vac to start another Dryer
1145	124	Water off
1200	125	"
1 pm	125	"
1.15	125	Water on Powder dry
1 30	122	
1 45	116	
2 pm	110	
2 15	105	
2 30	103	
2 45	98	

Powder 4 3/4 hours - Drying
1 1/2 hours Cooling

Vac 27 to 28"

All further on
1273 E Moulder Clean
Hoffman - Make one
Vac Dryer full of powder -
not allowing temp to
go over 125° Take Keep
time when alcohol etc
practically all out
Vac 28" or more not less
Print of Rounds 1261 E
Schedule - before
making further blanks
of OK Can make all kinds
blanks -
Print Reg Varnishing
with 2 brushfuls

C85

I have a hunch – 4653-C-141

(Smooth) leave this as heavy as you can

12th point

Extreme VVV surface

Start V

smooth to start with

120th = Start good – good

168th " good – good

good + V

V–

I love you California 2806-C-2-68

(Smooth) leave this as heavy as you can – (~~Crystals~~)

Start V

120th Start – V

168th V

only V

only V scant

about V

Dimoulds Expmt Aug 21/16 –

Mould 1 – turned very + thin, the other thick –

All 4 are smooth on back

~~Thin – Start – Nearly V surface~~

12th point

4402-C-9-3

Marriage Bells. turned thin 032 Crystals –

to start with but now smooth –

Start V =

120th point Start – V

168th " fair – fair

VV surface

good surface

good surface

Mariana Overture 2504-C-251

Crystals – leave this as heavy as you can (Crystals)

12th point

Start V =

120th Start – fair

168th " fair

V surface

good "

good

1274	1275	1276
OK	Low 2	OK
OK	OK	X
OK	X	OK
OK X	OK	
OK	X	OK
OK	OK	
OK		OK
OK	OK	X
OK X	OK	X
OK	OK X	OK
OK	OK X	OK X
OK Pulmt	OK	OK X
OK Low 2	OK X	OK X
	OK X	OK X
100%	91%	91%
25%	50%	50

1274E — 1275 — 1276 —

Loading Equipt by Dunwoddie
1 round each
Run them on 1261 Schedule
2 brushfuls —

1274E Powder put in pile in Center worked out with hand scraped. after pressing sheet rubber removed, powder is pressed down by hand before put on scraper
1261 E schedule 1 girl run all three tables 2 brushfuls - Printed Req —

1275E Raked across - worked with hands, scraped off — otherwise same as 1274

1276E Same as 1275 Except sheet rubber is put on in loading box

1277 E-B -

—	—
—	OK X
OK —	OK X
OK —	OK —
OK —	OK —
OK X	OK X
OK X	OK X
OK X	OK X
OK —	OK X
OK X	OK —
OK —	OK X
OK X	OK X
83%	91%
41%	66%

1277 E

Hoffman Make 2 rounds
1261 Schedule —
Load the mould by filling
a cone as now but
notate the spreads —

1261 Schedule -

2 brushfuls —

Print Reg

Apparently parallel Cks
Cone no matter how its
loaded, several leads

1278

OK X	OK	OK X	OK
OK	OK	OK X	OK
OK		OK chip	OK
OK	OK X	OK	OK
OK	OK	OK	OK
OK X	OK	OK	OK
OK	OK	OK X	OK X
OK	OK	OK X	OK
OK	OK	OK	OK X
OK	OK X		OK
OK	OK	OK	OK
OK	OK	OK	OK X
100%	91%	91%	100
16%	16%	33%	25

95.5
22.5

1278 E

1273 E Moulded clean but
this after standing in bags 12 hours
moulded dirty moulds
4 Rounds made green

powder brot up in Dryer to
125 & Cooled down by
water 1261 schedule

Held in bags 12 hours

Phenomenon, Unlike 1273, that (next page)
was not Exposed to air much
these records, dont show but little
of the bevel, & therefore deform more
~~than~~

1278 = 20-20-16-20-4-20
1273 20-20-20-20-20-15

no delay
12 hours

Blanks must not deform or
flow much if parallel cracks
are to be erradicated - this is
shown by all previous Experience

1273 Note These dont not fluctuate as usually as previous experiments = The GEWELL lapses is there — while other Experiments is generally almost gone — = a little more improvement which do the

OK OK X	OK OK —	OK OK —	—
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK —	OK OK X	OK OK —
	OK OK —	OK OK —	OK OK X
OK OK X	OK OK X	OK OK —	OK OK — Pow
OK OK —	OK OK —	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK —	OK OK —
OK OK X	OK OK —	OK OK X	OK OK X
OK OK —	OK OK X	OK OK X	OK OK —
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X			
100%	100%	100%	91%
83%	58%	66%	58%

1273 E See back 97/75% Comel 66% perfect

Vac Dryer full Temp 125° Fah.

Cooled by water — 1261 Schedule

Moulds were clean after moulding — Used powder right away — Mills Hof — 1261 Schedule =

The second test after this powder had stood in bags 12 hours - dirtied the moulds =

This shows that air has a bad effect on the powder, Either by absorbing water, or Oxidation =

Both can be cured by keeping in closed cans after making

Hoffman once remarked that Monday moulds always run dirty +

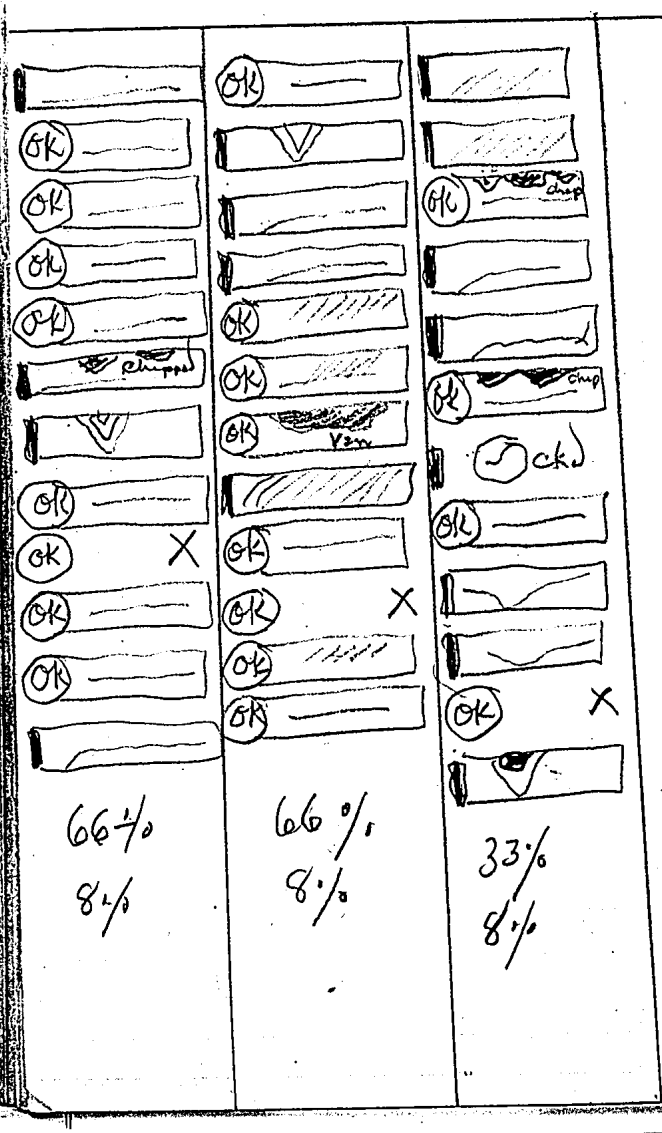
1279 E

OK OK —	OK OK —	OK OK —	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK —	OK OK X
OK OK X	OK OK X	[illegible]	OK OK —
OK OK X	OK OK —	OK OK X	OK OK X
OK OK —	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK X	OK OK X
OK OK X	OK OK X	OK OK —	OK OK X
OK OK X	OK OK X	OK OK X	OK OK —
OK OK X	OK OK X	OK OK —	OK OK X
OK OK X	OK OK X	OK OK —	OK OK X
OK OK X	OK OK X	OK OK —	[illegible]
	OK OK X		OK OK —
100%	100%	83%	91%
83%	83%	41%	66%
		93.5 Coucl	68.2 perfect

1279 E This is pretty good but flows too much yet, some bug somewhere else
Hoffman

Make another Vac
Dryer full of powder 125° Fah
Cool with water —

Grind the powder put
Two cans full away
Mould 4 Rounds —
1261 schedule —
2 Brushfulls
Print Reg —
Then hold the 2 Cans
1 of which after 24 hours
make 4 rounds + mould
at 1280E The other
Can hold for 48 hours
& mould under 1281 E
Moulds Clean, same moulds on 4 Rounds

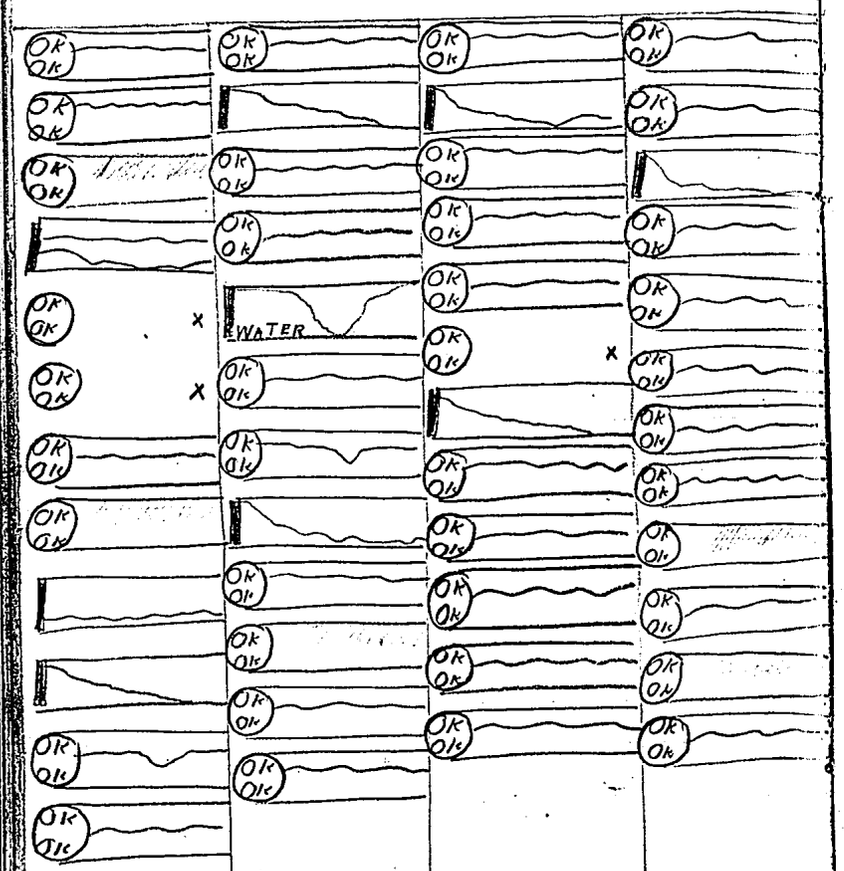


1280E

Same powder as 1279E
but held in Closed Can
24 hours

Same Moulds for all 4 rounds · kept clean

1281-E 8/29/16



75%	75%	83%	91%
16%	00%	8%	00%

1281 E

Same powder as 1279 E but had 75 hours in closed can

C1013

Note that 1273 powder used immediately gives better drop test than 1278 which is same powder kept in bags 12 hours & hydrated —

Note = Records that after Printing show the full bevel & do not flow on 1261 schedule are almost free of parallel Cracks & are good — This apparently can be attained by not going above 135° in Vac & cooling in Vacs & keeping powder in closed cans so wood fibre cannot absorb moisture, & grinding it so powder dont go much above normal temp in grinders & keeping powder in closed cans till used —

Good results are obtained by keeping away moisture although powder gets hot in grinding = but its best to have grinder cold as possible by a water jacket Etc.

1282 E Drop Test

Aug 25/16 20-2-9-1-12-20

OK OK X	OK OK	OK X	OK
OK OK X	OK OK	OK X	OK X
OK OK X	OK OK X	OK X	OK X
OK OK X	OK OK X	OK	OK X
OK OK X	OK X	OK X	OK
	OK	OK X	OK X
	OK X	OK X	OK X
OK OK X	OK	OK X	OK
OK OK X	OK	OK X	OK X
OK OK X	OK	OK X	OK
OK OK X	OK	OK X	OK X
OK OK X	OK X	OK X	OK
OK OK X	OK		
OK OK Chipped			

Average

Calliper - 219, 218, 224, 212, 212, 218 } 217

91-%	100%	91%	100%
83%	41%	83%	58%

Cracks very fine

1282 E

Hoffman make up one dryer full of powder 3½ parts Wood fibre 3½ parts of Chalk & 1 Shellac Dry at 125° Fahr water Cool Grind some immediately & Run Them 4 Rounds - & also fill Two closed Cans of ground powder, & will let you know what to do with Cans —

Make blanks on 1261 Schedule

2 trees to fells & present Rep

Same set moulds for 4 rounds moulds Clean but had bits as if air got in dont hurt in making blanks but may give trouble up stairs

C1073

Records filled Gavel

Dumoiddies Experiment

1238 E Unit 8 - Inspection before Var 11 greyspots
See Top of Each column

Unit 3 11 greyspots	Unit 2 10 grey spots			
OK OK X	OK OK —			
—	OK OK Streak 2 weeks			
OK OK —	—			
—	OK OK —			
OK OK X	OK OK —			
OK OK X	—			
OK OK —	OK OK —			
OK OK —	OK OK —			
OK OK X	OK OK —			
—	OK OK —			
OK OK X	OK OK X			
OK OK —	OK OK —			
75%	83%			
41%	8%			

Unit 8 11 grey spots	Unit 4 8 greyspots	Unit No 1 9 greyspots	No 7 Unit 10 grey spots
OK OK X	OK OK X	OK OK —	OK OK —
OK OK X	OK OK —	OK OK —	OK OK —
OK OK —	—	—	OK OK —
OK OK X	OK OK —	OK OK —	OK OK X
OK OK —	OK OK —	OK OK X	OK OK X
OK OK —	OK OK —	—	OK OK —
OK OK X	OK OK —	OK OK —	OK OK X
OK OK X	OK OK X	OK OK —	OK OK X
OK OK X	OK OK —	OK OK X	OK OK —
OK OK Po	—	OK OK —	OK OK —
OK OK — Po	—	—	OK OK X
OK OK X	OK OK —	OK OK X	OK OK —
			OK OK —
100%	83%	75%	100%
50%	25%	25%	41%

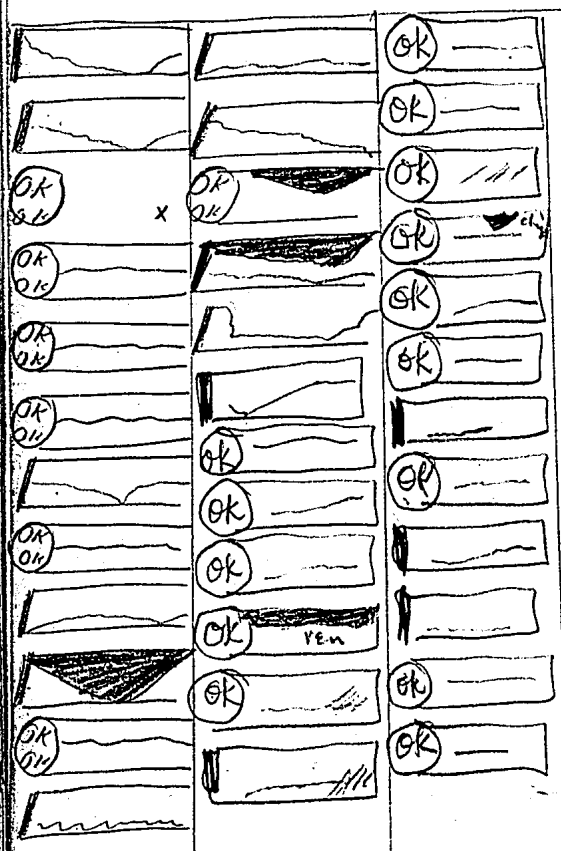
1283 E

OK	X	OK	X
OK	—	OK	X
OK	////	OK	X
OK	X	OK	////
OK	—	OK	—
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X
OK	X	OK	—
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X
100%		100%	
75%		75%	

1283 E

Print 2 Rounds req blanks
not bevelled but sharp
Edge Taken off by file –
Req Varnish –
Req Print –

1284E



50% 50% 75%

8% None none

1284 E

Hoffman = Make some Reg powder. 200 lbs more or less want 4 Rounds The powder is regular but the amount of Lampblack is doubled

Blanks to be made 1261 schedule
Varnish 2 brushfull

Print Reg

Same moulds used for 4 rounds
Moulds clean except each time wiped off with dry cloth.

1285 E

Kracher

Print 4 rounds with blanks that ~~are~~ have a different bevel – you will have to change one bevelling machine –

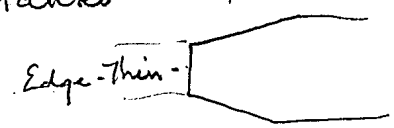
1286 E

OK	[redacted]
OK X	OK PO
OK Pull	OK
OK Pull	OK PO
OK X	OK
OK X	OK X
OK Pull o	OK X
OK Pull out	OK
OK	OK PO
OK X	OK X
OK X	OK X
OK Pull	OK X
100%	91%
41%	41%

95.
41

1286 E

Select 2 Rounds of blanks



Varnish + Print Reg

Note fine line near Edge pull outs.

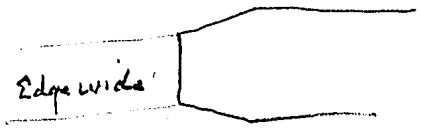
This seldom occurs regularly When it does it, probably does to a thin blank ~~[illegible]~~ a thin Edge

1287E

OK	X	OK	X
OK		OK	X
OK			
OK		OK	X
OK	X	OK	X
OK		OK	X
OK		OK	X
OK		OK	X
OK	X	OK	X
OK	PO	OK	
OK	X	OK	X
OK	X		
OK	X	OK	X
100%		83	
50%		75%	

1287E

Select 2 Rounds of blanks



Present & Normal Reg

Note almost absence of Line Pull outs in this against 1286 Thin Edge

Thin Edge	Thick Edge
95 Comal	90 Comal
41 perfect	62 perfect -

But 1283 Reg blanks Not Bevelled
is better
100% Comal
75% perfect -

1288E

OK X	OK —	OK X
OK X	OK X	OK —
OK X	OK X	OK X
OK —	— Chip	OK X
OK X	OK X	—
OK —	— and	OK —
OK X	— Ocks	—
—	OK X	OK —
OK X	OK X	OK —
OK —	OK —	—
OK —	OK —	OK X
OK —	OK X	—
91%	66%	66
50%	50%	33%

1288 E

1280
1288 Were in one oven
1288
all double Vars

Hoffman — May be bad schedule in oven & too wet 1289 was in but that a single Var

Make some powder, mixed 1/3rd longer in the mixer than regular run it then in Cans & make up 4 Rounds 1261 schedule

2 Breakfalls Varnish

Print Req —

Thes to go then on 125° for Coal in Dryer lot which is now standard

4 rounds same moulds kept clean Except had to pe off each time with dry cloth,

Note = it is not true that blanks which dont show flow & bevel is shown full dont Crack = Thes 1288 presented bevel + no flow still Crack

OK		OK X
OK X	OK	OK X
OK	OK	OK X
OK	OK X	OK
OK X	OK X	
OK X	OK X	OK
OK X	OK X	OK X
OK X	OK X	OK
OK X	OK X	OK X
OK X	OK	OK X
OK X	OK	OK
OK X	OK	OK
100%	91%	91%
95%	50%	50

1289 E

Kurcher.

Make 4 Rounds regular blanks Not bevelled but sharp Edges off with file

Reg Vary Reg Point, recommended

OK X	OK X	OK X
OK X	OK X	OK —
OK X	OK X	OK X
OK —	OK —	OK X
OK —	OK X	OK —
OK —	OK —	OK X
OK —	OK X	OK X
OK X	OK —	OK X
OK —	OK X	OK —
OK X	OK —	OK X
OK X	OK X	OK —
OK X	OK X	OK —
100%	100%	100%
50%	66%	58%

1290 E

Hoffman

Make 4 Rounds regular blank on 1261 schedule

These blanks not to be bevelled, sharp Edges taken off —

Varnish 2 brushfulls

Print Reg

Dunwoodie —

Run a Vac Dryer full of Powder using only fresh Alcohol —

4 Rounds - 1261 schedule
2 drum fulls Vari —

4 Rounds Reg blank schedule

Duplicate these from Cans saved 4 24 hours old

This should show if its the alcohol —

If it is I will get a rectifying still —

~~[illegible]~~

Dunwoddie —

You better raise temperature of Vacuum Dryer from 125° Fahr to 150° since we have found its not Oxidation, When we got good results it was 160° — 150° with 27 @ 28 Vac well. Take water out, and give Margin for neglect, by having temperature too low —

1291E

8/30/16

Oven #5	Oven #5	Oven #8	Oven #8
OK OK x	OK OK x	OK OK x	OK OK x
OK OK	OK OK	OK OK	OK OK
OK OK x	OK OK x	OK OK x	OK OK x
OK OK	OK OK	OK OK x	
OK OK x			OK OK x
	OK OK	OK OK x	OK OK x
OK OK	OK OK		OK OK
	OK OK		
OK OK x		OK OK x	OK OK x
OK OK x			
	OK OK	OK OK	OK OK x
OK OK x		OK OK	OK OK
OK OK x	OK OK		
	OK OK	OK OK	
	OK OK		OK OK x
83%	83%	75%	83%
58%	16%	33%	58%

I propose following test

1291E (see also 1291E B after 1302)

Make one Vacuum dryer full with powder using only fresh alcohol — 150° Hahn in Dryer-Coal

Put it in cans — by scoops take some from each can — Enough from each can to make 4 Rounds

Run on regular Varnish + but 2 rounds in one oven 2 in another

Print Schedule

See next page

Regular

Moulds clean -

1292-E

8/31/

Oven # 7	Oven # 7	Oven # 8	Oven # 8
OK OK	OK OK ×	OK OK ×	OK OK
OK OK	OK OK ×	OK OK ×	OK OK ×
	OK OK ×	OK OK ×	OK OK
	OK OK ×	OK OK	OK OK ×
OK OK ×	OK OK	OK OK ×	OK OK
OK OK	OK OK ×	OK OK ×	OK OK ×
OK OK		OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK	OK OK ×
OK OK	OK OK ×	OK OK	OK OK
OK OK ×	OK OK ×	OK OK	
OK OK	OK OK	OK OK	
	OK OK ×	OK OK ×	
OK OK	OK OK	OK OK ×	
75%	91%	100%	83%
25%	66%	58%	50%

1292-E

Duplicate of 1291E

Scoops from all the Cans

Taken 24 hours afterwards

4 Rounds

in Varnishing bake 2 rounds

in one oven 2 in another

1293-E 9/5/1

Oven # 8	Oven # 5	Oven # 8	Oven # 5
OK OK	OK OK x	OK OK x	OK OK x
OK OK	OK OK x	OK OK x	OK OK x
OK OK x	OK OK	OK OK	OK OK
OK OK x	OK OK x	WATER	OK OK
OK OK		OK OK x	
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK	OK OK x
OK OK x		OK OK low - 3	OK OK x
OK OK	OK OK x	OK OK x	OK OK
OK OK x	OK OK	OK OK x	OK OK
OK OK x	OK OK x	OK OK x	OK OK x
100%	83%	91%	91%
66%	66%	66%	58%

1293.

Duplicate of 1291E But taken 48 hours afterwards — 4 Rounds let the balance of the powder go thru regular

In varnishing bake 2 rounds in one oven 2 in another

1294-E

8/30/1

Oven #5	Oven #5	Oven #6	Oven #6
OK Ok	OK Ok	OK Ok	OK Ok
OK Ok	OK Ok	OK Ok	OK Ok
OK Ok	OK Ok	OK Ok	OK Ok
	OK Ok	OK Ok	
OK Ok	OK Ok	OK Ok	OK Ok
	OK Ok	OK Ok	OK Ok
OK Ok	OK Ok	OK Ok	OK Ok
OK Ok	OK Ok	OK Ok	
OK Ok	OK Ok	OK Ok	
OK Ok	OK Ok	OK Ok	OK Ok
OK Ok	OK Ok	OK Ok	OK Ok
	OK Ok	OK Ok	
OK Ok	OK Ok	OK Ok	OK Ok
OK Ok	OK Ok	OK Ok	OK Ok
	OK Ok	OK Ok	OK Ok
OK Ok	OK Ok	OK Ok	OK Ok
	OK Ok		
83%	100%	100%	83%
66%	75%	83%	58%

1294 E

Dryer full powder mixed with fresh alcohol — But mix this powder 1/3rd longer than usual

Put in Conv. by Scoops make 14 Rounds — (Vac 1450° Fahr Cook 2 hr 10 min 150°)

Furnished regular way 2 rounds baked in one oven 2 in another

|| moulds very dirty — one big pull out — Hoffmann

C147

1295-E 9/5/1.

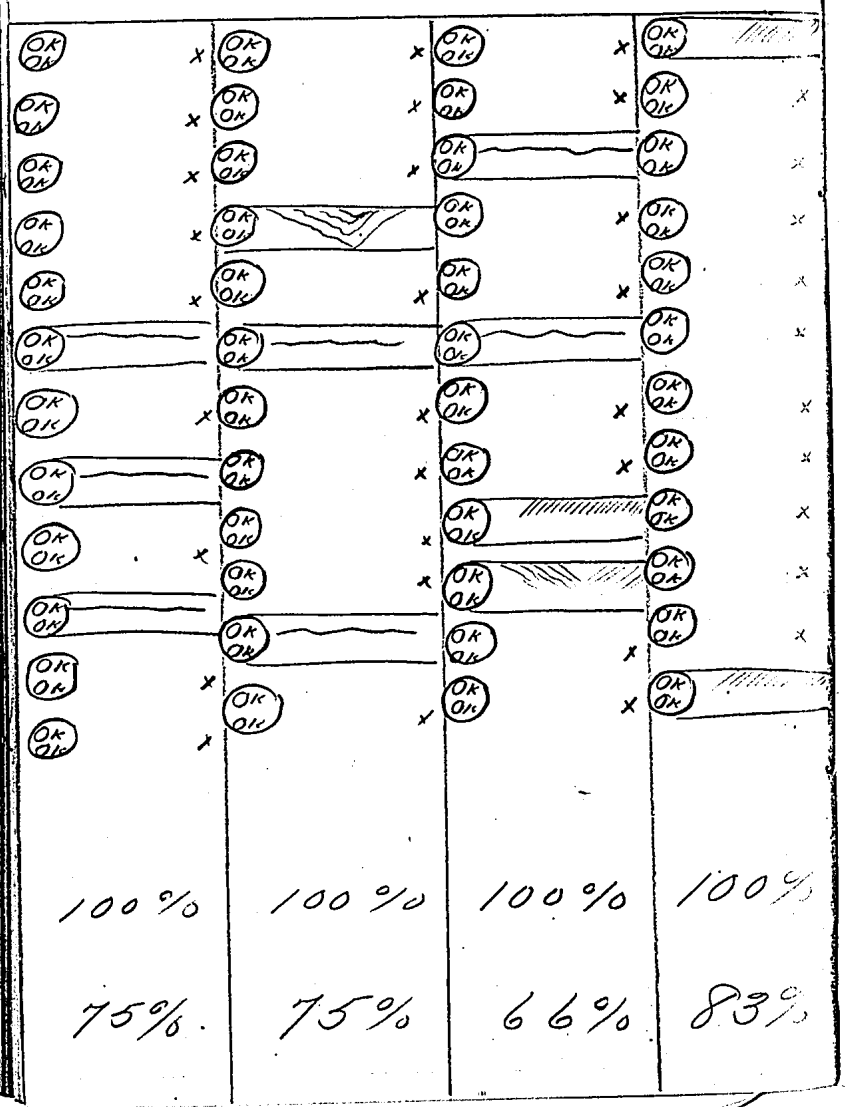
Oven # 6	Oven # 5	Oven # 5	Oven # 6
100%	91%	100%	83%
83%	66%	83%	50%

1295 E

Dup of 1294 E

But with scoops 24 hours afterwards

1296-E 9/5/



1296 E

Dup of 1294

but made 48 hours afterward —

Rosin will lower the melting point of shellac & make it sticky which may be what we want. Dealer guaranteed no Rosin but I think at times it gets in —

Demonstrate —

If any of these show up good, Duplicate using 1261 schedule —

also to see if nothing has changed Duplicate with Regular poor Alcohol as we now use —

~~Also~~ Note 1297 if it Comes out OK might Duplicate on 1261 schedule

This will show if Rosin does anything

1297-E 8/30/1.

Oven # 7	Oven # 7	Oven # 8	Oven # 8
OK OK x	OK OK x	OK OK x	OK OK x
OK OK	OK OK x	OK OK x	OK OK
OK OK x	OK OK	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK
OK OK x		OK OK x	OK OK x
OK OK x	OK OK	OK OK	OK OK x
OK OK	OK OK	OK OK	
OK OK x	OK OK x		OK OK x
OK OK x	OK OK	OK OK x	OK OK x
OK OK x	OK OK x	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK x
OK OK x	OK OK x	OK OK x	
100%	91%	91%	91%
75%	50%	58%	66%

1297E

One Dryer full regular Alcohol + powder Except 4—3—1 Shellac Containing 5% of Rosin, (12) the 1 part of Shellac is 95% shellac and 5% Rosin —

Put all in Cans + use Scoops from all Cans —

make 4 Rounds Reg Varnish — 2 rounds baked in one oven + 2 in the other =

Print Reg

|| moulds only fairly clean || no discards.

1298-E 8/28/16

OK	OK	OK	OK
	OK	OK	
OK	OK	OK	OK X
OK X	OK		
OK X	OK X	OK X	OK X
OK	OK	OK	OK X
OK	OK X	OK X	X
OK			OK X
OK	OK	OK	OK X
	OK	OK X	OK
OK	OK	OK X	OK
OK	OK	OK X	X
VENEER			
83%	91%	83%	83%
16%	16%	41%	58%

1298 E

Req powder all 4 Rounds
mCans —

4 Rounds —

Req Vacu
Req blank schedule —
Req permit —

1227-E Repeated — 8/28/16

OK OK x	OK OK x	OK OK VEN	OK OK x
OK OK x	OK OK x	OK OK x	OK OK
OK OK x	OK OK x	OK OK x	OK OK x
OK OK	OK OK x	OK OK x	OK OK x
		OK OK	OK OK x
OK OK x	OK OK x	OK OK	OK OK x
OK OK x	OK OK	OK OK x	OK OK
OK OK x	OK OK	OK OK	OK OK
OK OK x	OK OK x	OK OK x	OK OK
OK OK x	OK OK	OK OK x	OK OK
OK OK	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
OK OK x			
100%	100%	100%	75%
83%	75%	75%	33%

1299E

Mr. Hoffmann:

Please repeat Experiment 1227E as follows:

Put in fibre and lampblack and mix ten minutes.

Then add shellac and mix for ten minutes.

Then add chalk and mix for ten minutes.

Make 8 rounds regular schedule.

See next page for other Experiments

1299E 8 Pounds 8/31/16

91%	91%	83%	91%
50%	66%	66%	66%

1299-E 8 Pounds 9/5/16

91%	100%	100%	83%
25%	58%	83%	41%

[157]

8/31/10

1300E - 8 rounds
Same powder as 1299E
but pressed on 1261 schedule -
600 lbs cold
Steam for 6 minutes
Cool 10 minutes.

Varnish with two brushes
of regular varnish and
print regular.

83% 41%	91% 25%	75% 8%	75% 41%

1300E 8 Rounds 9/5/10

75% 41%	91% 41%	75% 33%	75% 50%

1301-E 9/5/1

OK OK x	OK OK	OK OK x	OK OK x
OK OK	OK OK x	Crk  Blk	OK OK x
OK OK x	OK OK x	OK OK	OK OK x
OK OK x	OK OK	OK OK x	OK OK Carr-1-3
OK OK x	OK OK	OK OK x	OK OK x
OK OK x	OK OK x	OK OK	OK OK
OK OK	OK OK x	OK OK x	OK OK
OK OK x	OK OK x	OK OK x	7
OK OK x	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK	
OK OK	OK OK x	OK OK x	
100%	100%	91%	100%
75%	75%	66%	75%

1301 E

Mr Hoffmann please take some powder that has been kept in cans for forty eight (48) or more hours and screen it again ^coarse screen and then make 4 rounds — regular schedule —

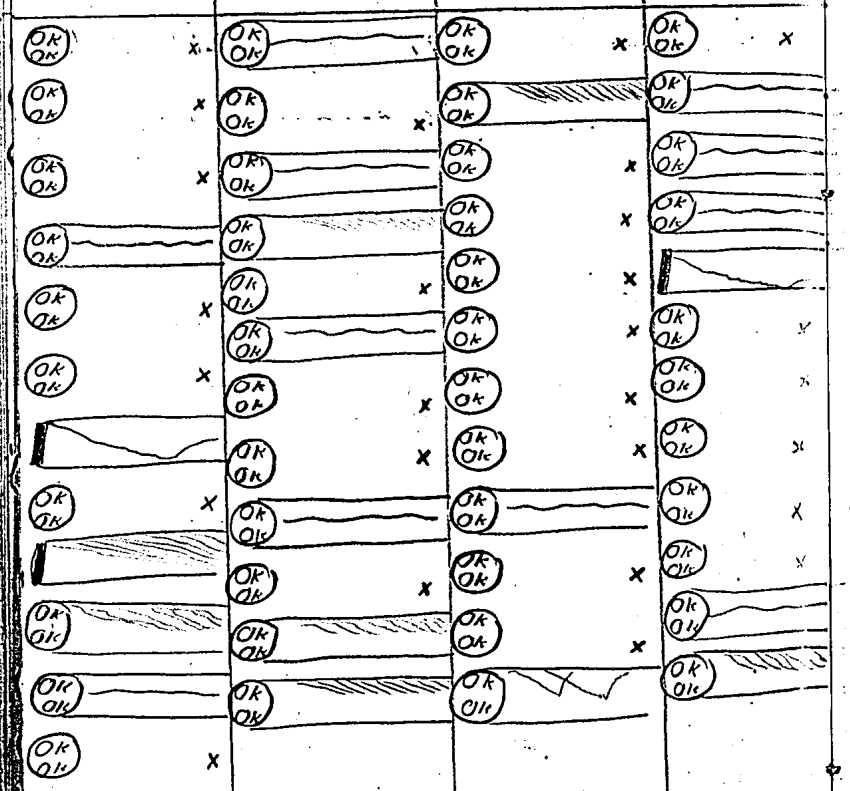
Only 43 [illegible] this lot instead of 48

1302-E 9/5/10.

Oven 5	Oven # 5	Oven # 6	Oven # 6
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK

1291-E-13.

18/30



83%	100%	100%	91%
58%	41%	75%	50%

1291 E-13 –
same as 1291 except 1261 schedule
moulds clean.

1303-E 9/6/16

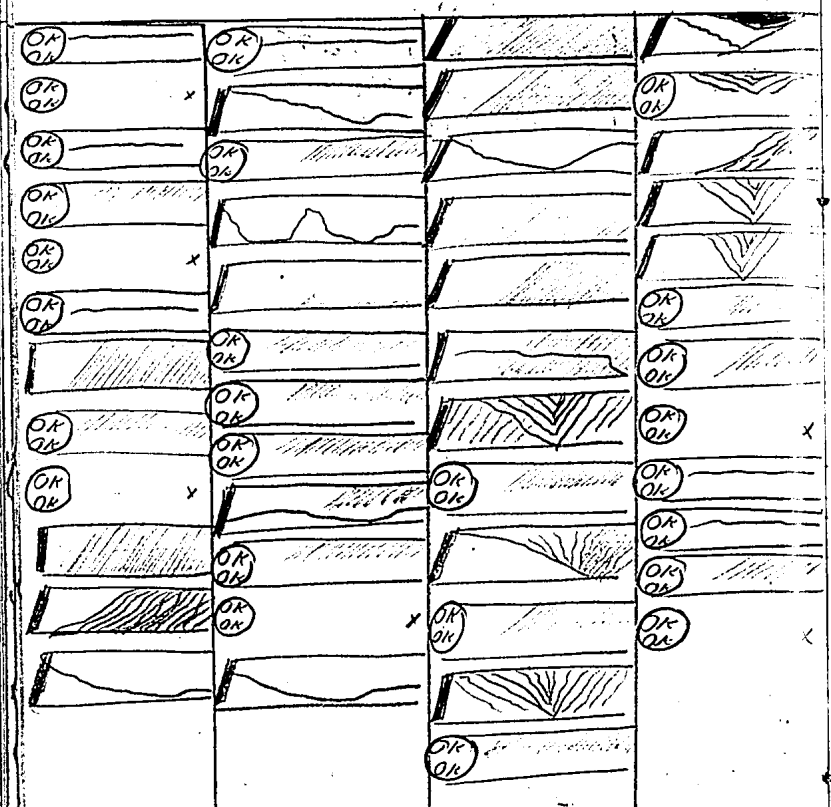
100%	91%	100%	100%
75%	66%	75%	91%

1303-E

Powder in cans throughout process -
between driers and grinder 8 hours -
between grinder & screens 8 hours -
between screens and blanks 2 hours -
Regular all thru -
8 rounds -

100%	100%	91%	91%
66%	41%	66%	66%

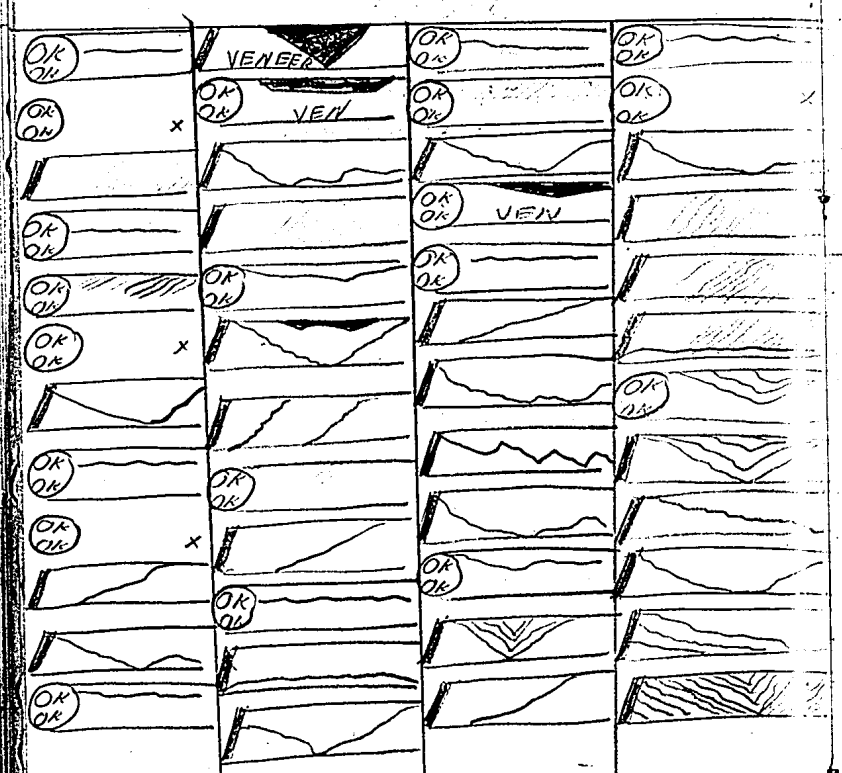
1304-E 9/6



66%	58%	95%	58%
25%	8%	00%	16%

1304 - E
Duplicate of 1299
4 rounds
All new alcohol

1305-E 9/61



66%	33%	41%	25%
25%	00%	00%	8%

1305-E
Duplicate of 1300 E
4 rounds -
all new alcohol

C717

1306-E

Mr. Hoffman —

Please make one load of blanks from each unit in which powder is loaded a little more in the center —

Unit #3	Unit #5	Unit #7	
OK OK x	OK OK		
OK OK	OK OK x	OK OK x	
			OK OK
OK OK x	OK OK x	OK OK x	OK OK
	OK OK x		OK OK
	OK OK		
	OK OK	OK OK VEN	
OK OK x			OK OK
OK OK	OK OK		OK OK x
	OK OK	OK OK x	OK OK
OK OK		OK OK x	
OK OK x	OK OK	OK OK x	
OK OK x			
66%	75%	50%	
41%	25%	41.	

9/8/

1307-E

Mr. Hoffmann — Please make a full batch of powder with 1/10 more shellac — duplicate of 1271 E — Except use bags — Mark it 1307-E
Send 8 rounds to Miller —

OK	OK	OK	
OK		OK	
OK	OK	OK	
		OK	OK Rev - 3
		Crk Blk	OK
OK			
OK		OK	
OK	OK	OK	
OK	OK	OK	OK
OK	OK	OK	OK
OK		OK	OK
OK	OK	OK	OK
	OK		
OK	OK		
83%	58%	75%	58%
8%	00%	16%	25%

1307-E 9/8

OK	OK	OK	OK
OK	OK		OK
OK		OK	OK
OK		OK	OK
OK	OK	OK	OK
OK		OK	OK
OK		OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	
OK	OK	OK	
OK	OK	OK	OK
91%	75%	91%	91%
25%	8%	50%	33%

Aug	Correct	Perfect	Ven po	Rounds	Records New M	NM Ven	NM Dis-	%
18	92.7	66.5	25%	40	303	—	2 Ven	63%
21	94	66.	20%	40	290	-	2 Ven 3 cks	60%
22	96.2	71.4	10%	40	291		1 Ven 7 cks	60%
23	89.1	72.2	10%	40	343		1 Ven 8 cks	71%
24	92.7	78.9	10%	40	378		3 V 8 cks	78
25	91.2	72.9	10%	40	397		2 V 7 cks	80%
26	90.2	66.6	10%	36	368		2 V 10 cks	80%
28	83.9	65.8	10%	40	427		5 1 P.C.	88%
29	90.7	75.4	10%	40	447		2 PC 6. 1 P.C	93%
30	81.	66	10%	36	379		1 V. 4 PC	87%
31	89.7	76.4	8%	40	458		2 V. 3 PC	95%
Sept 1	86.4	68..	10%	40	473		2 V. 4 PC	98%
2	95.8	84.7.	5%	36	432		1 3 P.C.	90%
5	88.7	74.5	3%	40	477		1 V. 3 PC	99%
6	80.9	62.4	00	38	456		1 3 P.C.	95
7	91.	56.	15%	40	480		1 V. 2 P.C	100%
8	91.4	65.8	10%	40	480		3 2 P.C.	100%
9	91.2	71.7	9%	36	432		2 6 P.C.	100%
11	94.5	72.6	10%	40	480		1 8 P.C	100%
12	93.7	79.1	3%	40	480		2 1 P.C.	100%
18	83.9	77	2%	40	480		2 5 P.C.	100%

Wages

Mould Repairers

Grade 1	Beginners	22½c hour
" 2	Repair without instruction	25c
3	Medium speciality of work	30
4	Expert repairers	35
5	Foreman & Instructor Expert	40

Mould testers -

Beginners -	22½ cents
1 month	25
2 "	26
3 "	27
4	28
6	29
over 6 month	30

Nights 10% more, -

Pressmen & Mould assemblers

Beginners	27 cents
1 month -	28
3 "	29
6 "	30

Bonus

If more than 25% of moulds in actual use in presses are discarded for Dents Bruises or injuries due to careless handling no bonus paid

If Discards are

25%	5% bonus
25	10% "
15	15% "
10	20% "

adding	Bonus of 25	20	15	10
27c	283	297	31	324
28	294	308	322	336
29	304	319	333	348
30	315	33	345	36

Night Crew 1/5 more bonus than Day

Mould Holders Clancy has

			Total 1651.
14th rec'd	43		% of all
Square edged		733.	44%
15	40	773	46%
16	43	816	49.4
17	37	853	51.6
18	34	894	
19	13	907	
21	41	948	57.4
22	40	988	59.8
23	36	1024	62%
24	35	1059	
25	50	1109	
26	50	1159	
28	18	1177	
29	24	1201	
30	39	1240	
31	40	1280	
SEPT 1	19	1299	
2	35	1334	
5	21	1355	
6	40	1395	
7	35	1430	
8	28	1458	
9	38	1496	
12	16	1512	

Sept 13	23	1537
14	19	1556
15	10	1566
16	17	1583
18	9	1592
19	10	1602
20	9	1611
21	8	1619
22	6	1625

Aug 14 - 1916 Clancy -

Mould Holder Inventory

Bevel Edged	534
Square "	626
Waiting for bushings	107
Not yet inspected	26
require repairs	18
	1311

Rev

OK ready to deliver	11
to be refinished, holes plugged etc	27
to be inspected & slight fitting	50
to be polished	61
to be lapped	18
in process of filling rings	86
rings drilled & tapped	62
with rings to fit	25
	1651

Discarded too thin can have piece put on the back	71
Have blanks for plates	137
" " rough Turned	34
	242
	1651
	1893

[ITEM(S) FOUND IN BOOK]

444-E Varnish with Lead Resinate supposed to have been used on poisonous experiments (1381)

[ITEM(S) FOUND IN BOOK]

NO-1445-E. Resonate of Lead free from Resin. Put through fine grinding paint mill with alcohol. then Alcohol filtered off on Vac filter Resonate not allowed to dry. filtered OK through two thickness of linen

NO-1446-E. Resonate of Lead free from resin that had been dryed rewet with alcohol then filtered to get rid of alcohol cake not allowed to dry - then put in mortar with a little varnish to work up the cake - filtered OK

[ITEM(S) FOUND IN BOOK]

1447-E. Made Resinate of Lead washed on filter with water then partly washed with alcohol on filter then give one wash in flask to extract resin filtered off alcohol then took 10g- ground in morter with a little varnish to work out the lumps then put in Reg mixer run 1 hr - filtered OK

1448-E. Dup of 1447-E except two treatments with alcohol to extract resin (No-1447 + 1448 to much chance for water also to much alchol required

[ITEM(S) FOUND IN BOOK]

1452-E. Dup of 1448-E except filtered through 1 thickness of linen

1453-E Made with resin extracted from Resonate of Lead which has given good results - the resin contains some lead
6. grams resin
175 " Varnish

1454-E Made with resin extracted from lately made Resonate of lead
6. g Resin
175 " Varnish

[ITEM(S) FOUND IN BOOK]

No. 1454 E
Made with Resin that Contains lead
That was extracted from Resonate of lead
that has been made lately

No 1455 E
Resonate of lead made with
40 g NaOH at 20 Be
40 g Resin + Lead Nitrate sol.
Hard filtering had to change linen
twice

1456 - E
Resonate of Lead
40 g NaOH at 20 Be
50 g Resin + Nitrate of Lead sol.
Hard filtering Resonate of lead not all
dissolved

[ITEM(S) FOUND IN BOOK]

1457-E
Resonate of lead made with
40 g NaOH at 20 Be
30 g Resin + Nitrate of Lead sol
Hard to filter had to change
[illegible]

1458-E
Resonate of Lead made with
40 g NaOH at 20 Be
25 g Resin + lead nitrate sol
Hard filtering
1459 E
Resonate of lead made with
40 g NaOH at 20 Be
20 g Resin + Lead Nitrate sol
Hard filtering

[ITEM(S) FOUND IN BOOK]

1461- O K Bally's No. 14
5 grams (Resonate of Lead)
175 grams Varnish without Lamp
Black. Very bulky

1465- OK
8 grams Resonate of Lead
175 g Varnish without Lamp
Black. Very bulky
Hard filtering

1464 Dup of No Bally's No-1 Resonate of Lead. N.B. made light black
Dup of 1462 except
1463 ~~Bally's No. 83 Resonate of Lead~~
10 g Resonate Lead to 175 g Varnish OK
Hard to filter

[ITEM(S) FOUND IN BOOK]

1462 (Daily's Recovery of Lead 240 33
5 g R, Lead to 175 g Varnish
very bulky - Hard to filter
OK

1466 Dup of 1461 Except
made in Large Batch 33 lbs
Recovery of Lead

[ITEM(S) FOUND IN BOOK]

1849E

Ten Leading mach. from Lab.
Blanks califs.

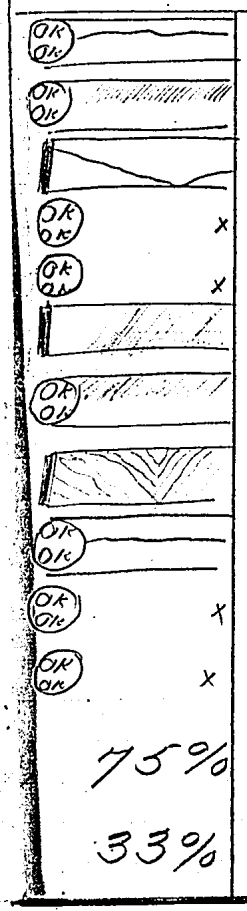
#1 - 214 - 244 - 30
2 - 225 - 254 - 19
3 - 251 - 258 - 7
4 - 228 - 262 - 34
5 - 223 - 261 - 38
6 - 240 - 265 - 25
7 - 211 - 239 - 28
8 - 234 - 249 - 15
9 - 243 - 253 - 10

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 19
Notebook, N-16-09-07

This notebook was used by Edison during September-December 1916 for notes on experiments to improve the manufacture of disc records. There are also notes by William W. Dinwiddie, Archie D. Hoffman, and other experimenters. The entries describe a sequence of experiments numbered from 1308E through 1388E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients. Some tests involve variations in the varnish preparations used to coat the record blanks or in their method of application. Flaws and successful results are both noted. One notation indicates that the results of experiment 1381E were reinspected in January 1917. At the end of the book are tallies of record blanks produced. Some notes are the form of instructions to Hoffman or Dinwiddie. The front and back covers are labeled "19." The pages are unnumbered. Approximately 150 pages have been used.

9/7/16

1308-E
Powder blanks press experiment –
cold press 600 lbs –
Steam on 7 min.
Cool 10 min.



C.J

11309-E 9/7/16

OK OK	x		
OK OK			
OK OK	x		
OK OK	VEN P.O		
OK OK	VEN		
OK OK			
OK OK	x		
OK OK	x		
OK OK	x		
OK OK			
OK OK	VEN PO		
OK OK	x		
	100%		
	50%		

1309E
Powder blank press experiment
Cold press 600 lbs.
Steam on 8 min.
Cool 10 min.

1310 E 9/7/16

OK OK VEN

OK OK

OK OK ×

OK OK ×

OK OK ×

OK OK VEN P.O.

OK OK VEN + CN.

OK OK

OK OK

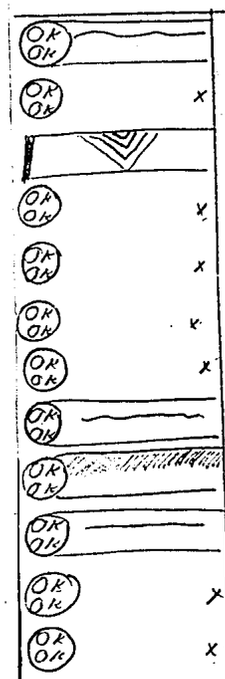
OK OK

83%

85%

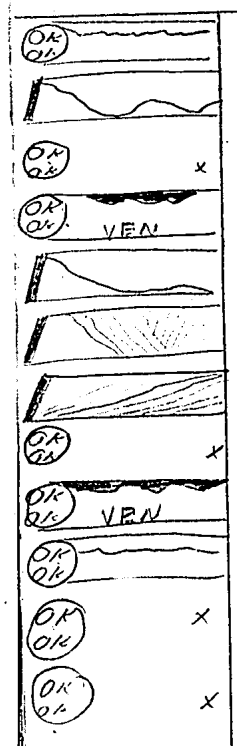
1310 E
Powder blank press experiment.
Cold press 600 lbs
Steam on 9 min
Cool 10 min

1311-E 9/7/1



1311 E
Powder blank press Experiment
Cold press 600 lb
steam on 10 min
Cool 10 min.

1312-E 9/7/16



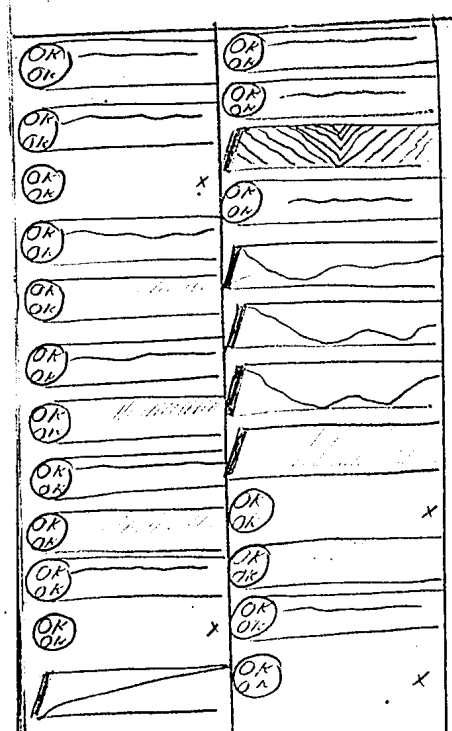
66%

33%

1312-E
Powder blanks press Experiment.
5 min contact with steam
5 min high pressure
10 min. Cool.

If blanks appear to need
it use two brushes of varnish
This applies to 1308-E to 1312-E inc.

1313-E 9/7/16



91%	58%
16%	16%

1313 E.

two rounds of regular blanks varnished with two brushes of varnish.

Regular in all other respects –

8 15 –	4.8%	water – Neo alcohol	1314 E	
8 20	6	OK OK	OK OK	
8.25	7.4	OK OK	OK OK	OK OK
8 30	8.9	OK OK	OK OK	
8 35	10.4			
8 40	11.9		OK OK	OK OK
8 45	13.5			
8 50	15.2	OK OK	OK OK	
8 55	16.9	OK OK	OK OK x	
8 60	18.7			OK OK
8 65	20.4	OK OK x	OK OK x	
8 70	22.3	OK OK	OK OK	OK OK
8 75	24.2		OK OK	OK OK
8 80	26.1		OK OK	OK OK
8 85	28			
8 90	30		OK OK	OK OK
8 95	32.1	OK OK	OK OK	
9 00	34.2	OK OK		
OK OK				
OK OK	x			
OK OK				
Ok. Bll.		75%	100%	58%
OK OK		8%	16%	00%
OK OK	x			
6				

1314 E

Hoffman

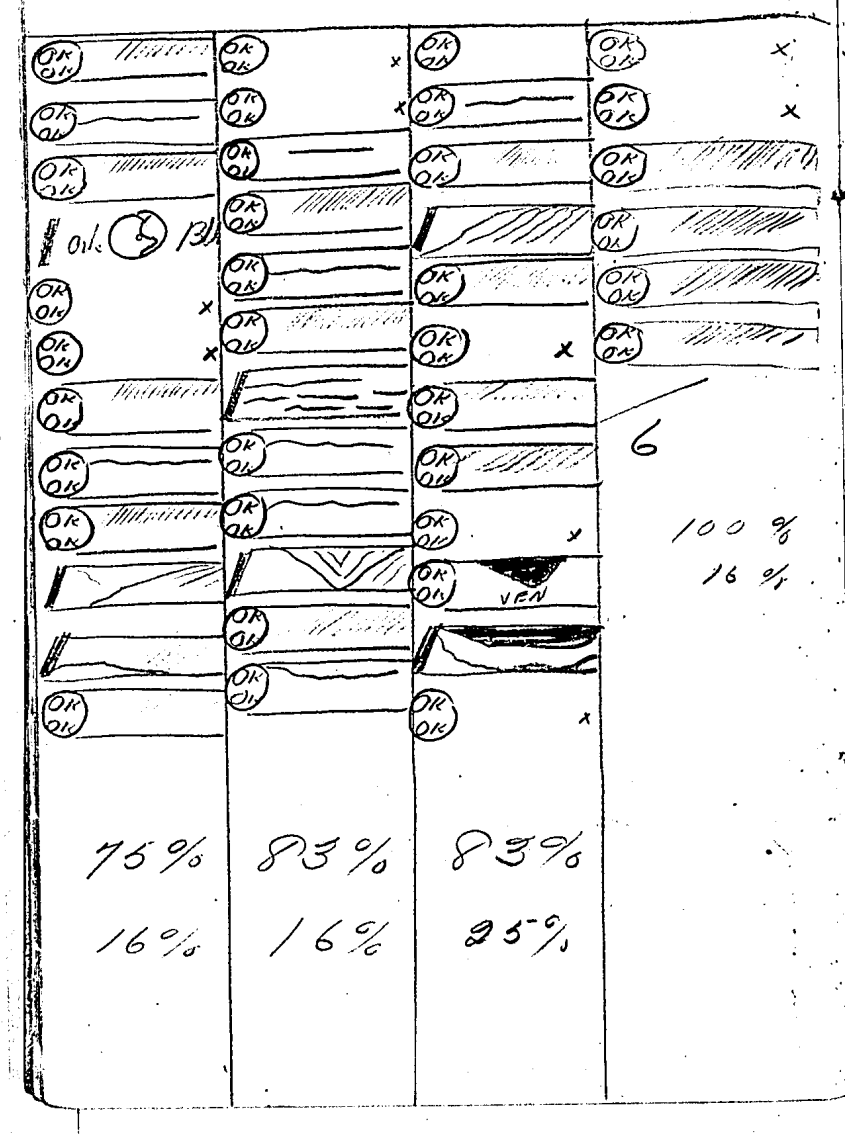
Make one dryer full of powder Using Varnish made with Alcohol of Specg 8.70. –

Make 4 rounds blanks Print Req

Cover Moulds. Dust

48 Made 2 pull Outs
46 Delivered

Only received 42



1315 E

Dup of 1314 E

4 Rounds blanks

made on 1261 Schedule

Yarnell & Greenfields

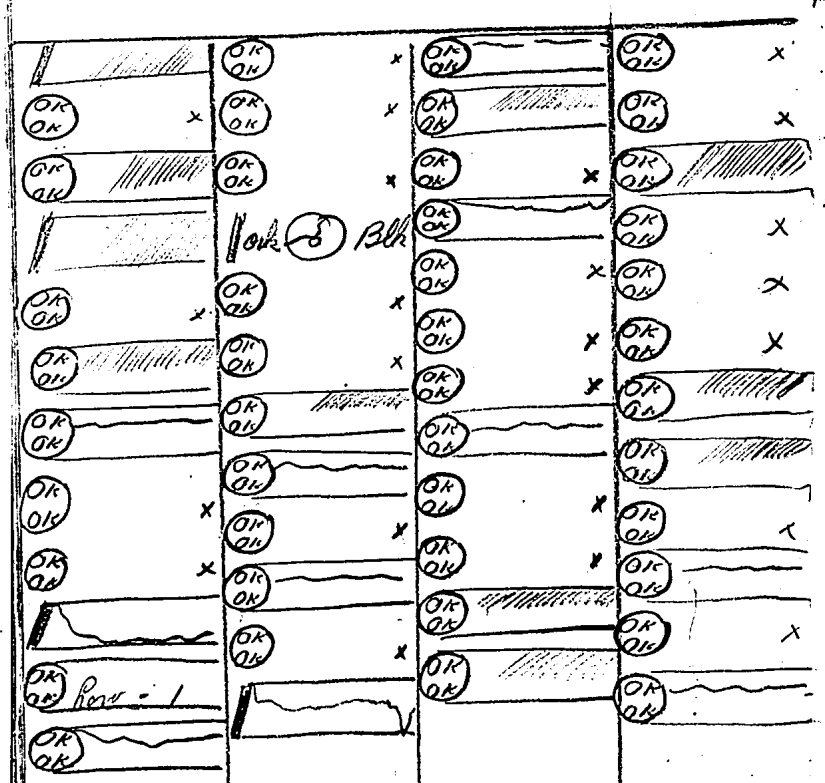
Paint Rag

leaves Moulds dirty

48 Made, 2 cracked, 3 part Chal

1 chalk spot. 42 Delivered

1316-E 9/18/16



75%	83%	100%	100%
33%	58%	50%	58%

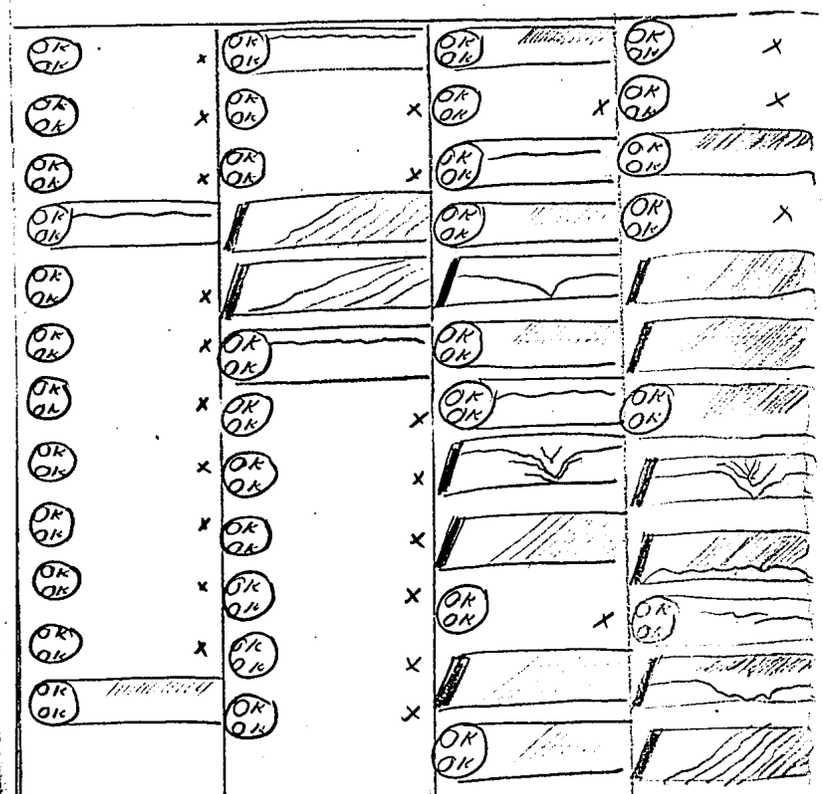
1316E

Take a bag of regular powder put in a closed box over a pan that has much of boiling water in — let it stay 24 hours — then make up 4 Rounds of blanks

Print Reg
leave Mold [illegible] in spots
48 Made 48 [illegible]

1317-E

2/24/16



100%	83%	66%	50%
83%	66%	16%	25%
			74.3 / 47.5

{ exposed later

1317E

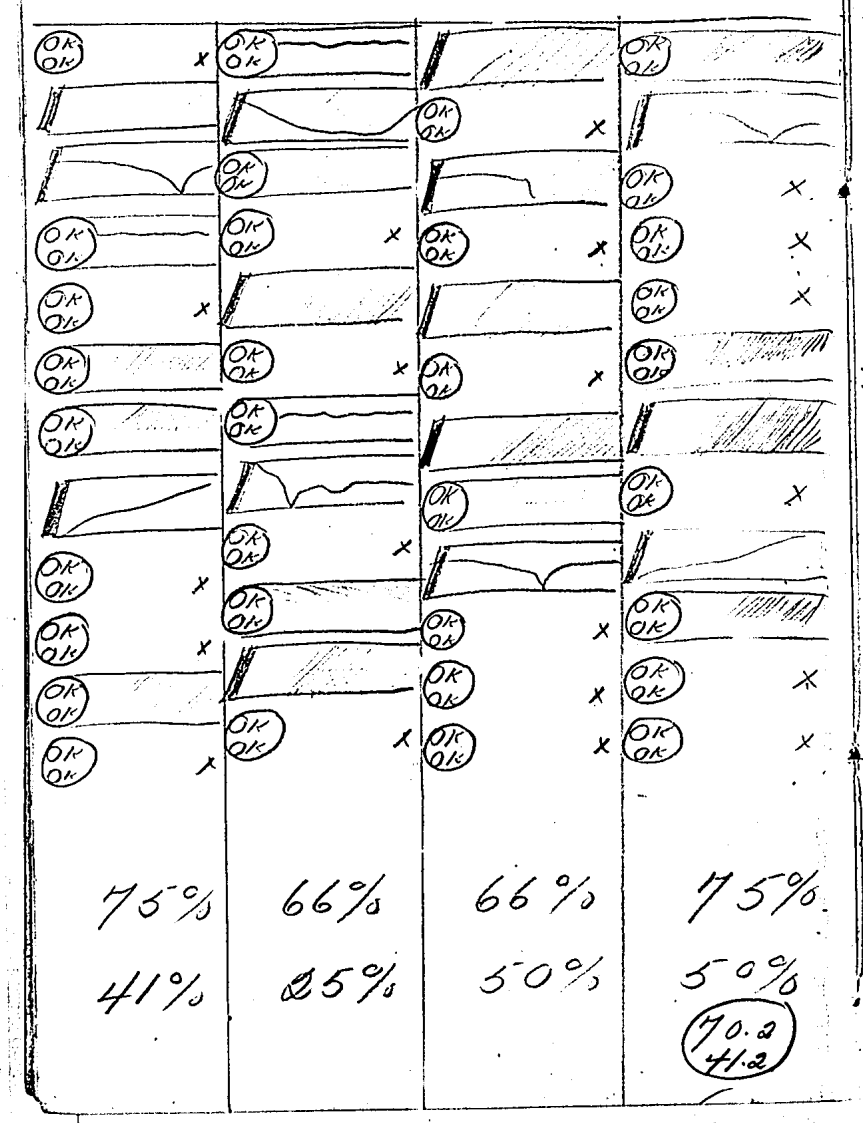
Hoffman

Make one Dryer full regular powder but use only Dupont fabric

Send to Raymond

Yard Print Reg

1318-E 9/14/6



1318 F

Hoffman

Make 1 Dryer full
Reg powder. but use
only foreign fibre

Send 4 Rounder up
Oteris plant +
Varnish Regular

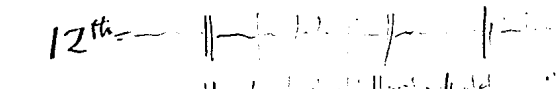
[2]

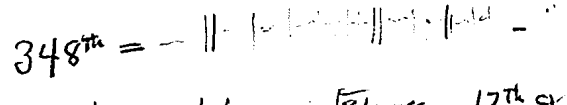
1319E

My C-Tis of these —

Amorphous Copper,

Nickel plated, heavy plated

12th = 

348th = 

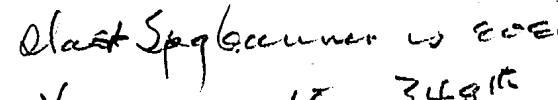
not any difference between 12th or 348th

the very good second on 348th —

Black Spg Gearwear is seen Gecco

V surface after 348th

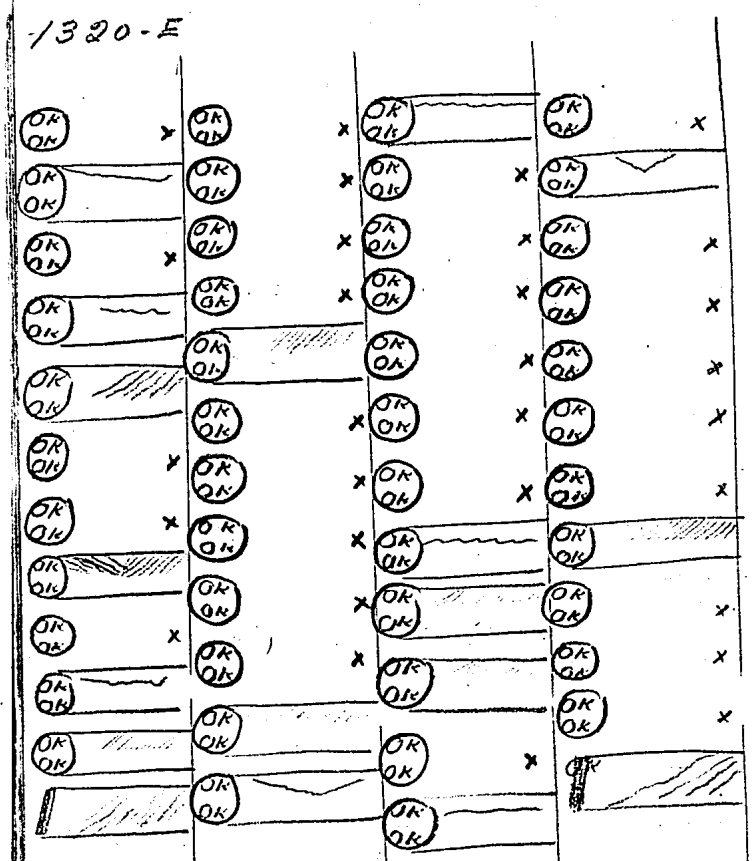
600th = about same as 348th the good

825th =  Cut out

Very Crackly surface 1st inch gradually gets better — No snaps that wanted cause a descrance

There has been terribly injurious between 600th or 825th

1320-E



91%	100%	100%	91%
41%	75%	58%	75%

95.5%
62.1%

1320 E

Print 4 Rounds Blanks

not bevelled, ~~Edges are to~~

~~the~~ take sharp Edges off with file — Varnish Edges

Reg one brushfull Var

Print Reg

Looks as if Square Edges were as good as Bevelled with square Edged Mouldings

1321 9/13/16

OK OK x	OK OK
OK OK x	OK OK
OK OK	OK OK
OK OK	OK OK x
OK OK	OK OK
OK OK x	OK OK
OK OK x	OK OK
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK
OK OK VEN. P.O.	OK OK
OK OK	OK OK x
OK OK x	
100%	100%
66%	33%

1321E

Fuehr take one powder blank mould & turn it out as it produces a blank which will fit the Record Mould holder with only 004 shake – it has 010 now – I suppose you can [illegible]

1322 F

Fred Ott weigh out 50 grains fresh black powder just as it comes from the screens

Put it in a closed box with warm water under it

after 3 hours weight

1.45 pm 50 grains
4.45 " 51.080 "
14 hours more 51.780 "

1323-E

9/

OK	OK	OK	OK x
OK		OK VEN	OK x
OK	OK x	OK x	OK x
OK	OK x	OK	OK VEN
OK	OK Rev - 3		OK
OK	OK	OK x	
OK		OK x	
OK	OK	OK x	
OK	OK	OK x	OK
OK		OK	
OK Rev - 2	OK x	OK	OK
	OK x	OK x	OK
			OK
83%	75%	91%	75%
00%	33%	50%	25% 81% 27.

1323 E

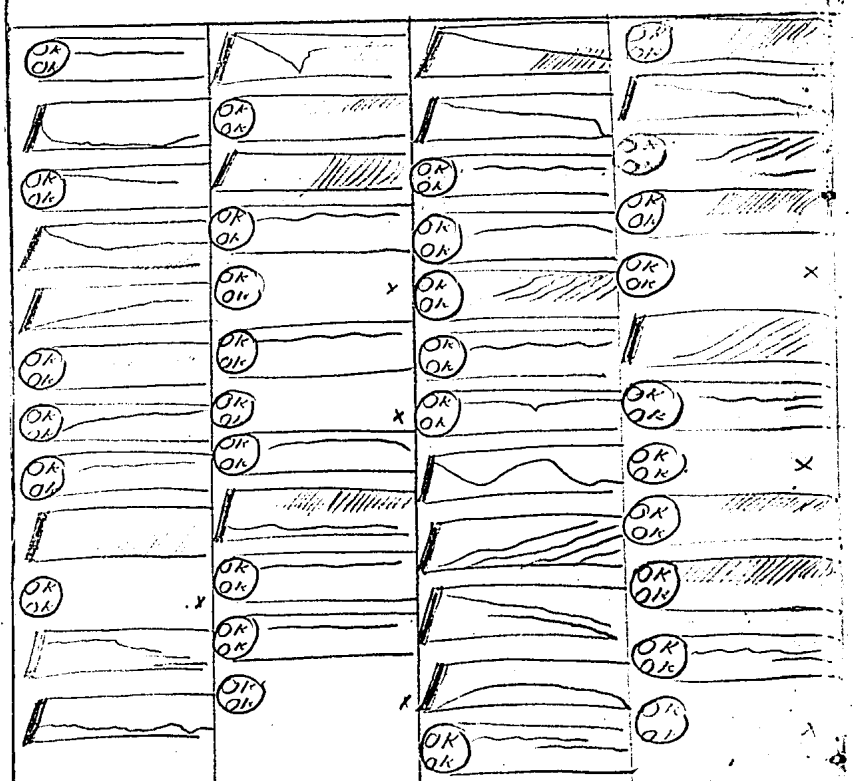
Powder from Mill with 35 mesh screen -

4 Rounds -

Req Var Req found

CJJ

1324-E 9/15/..



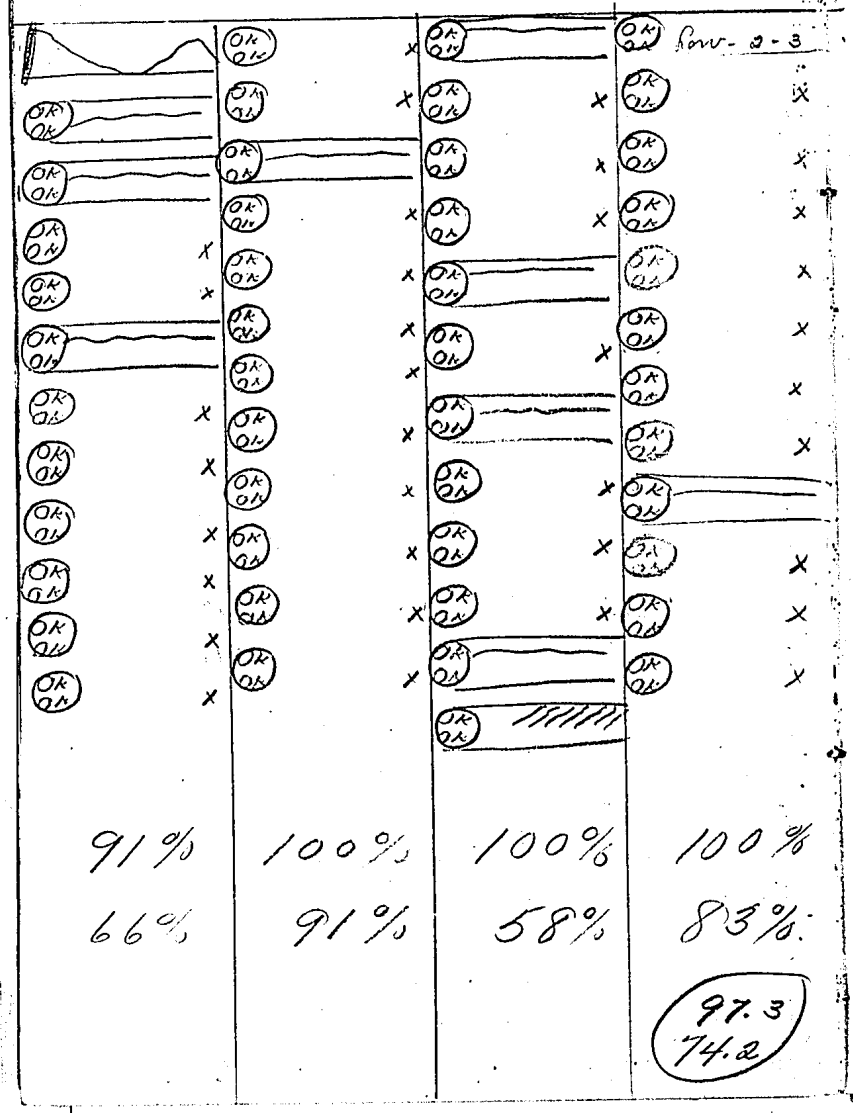
50%	75%	50%	83%
8%	25%	—	25
			62
			14.2

1324E

Dup of 1323

Except 30 mesh screen

1325-E 9/9/-



1325 E

Hoffman

When 20 mesh screen is on grendai, Run powder over screens 5 times to get all the Coarse you can through + Make 4 Rounds of blanks

Reg Varmint Reg

Permit

C35J

1326-E 9/19/6

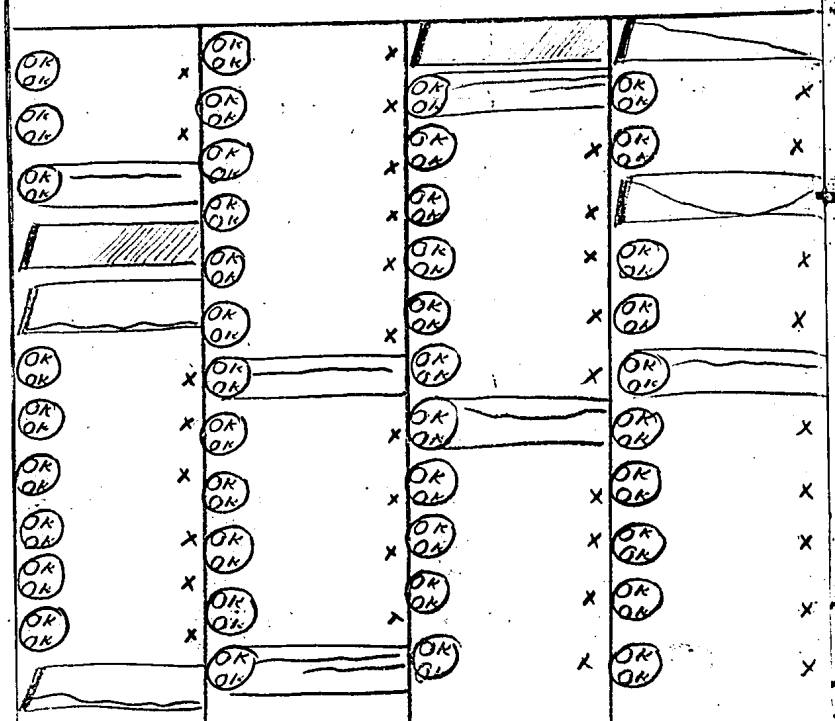
100%	83%	83%	100%
66%	41%	58%	66%
			91.8
			57.3

1326- Hoffman

Same as 1325 — except mould powder without screening —

4 Pounds.

1327-E 9/20/16



75%	100%	91%	83%
66%	83%	75%	75%

1327-E

Special Screens.

Steel — 24 mesh — 28 B&S wire
on Fuller mill.
Screened 5 times thru Newaygo screen —
Mould — Varnish and print regular

Fineness of Ground Powder { 73% passes 180 mesh
48% " 350 "
Sifted powder { 96% " 180 "
" 68% " 350 "

{ 390 pounds were ground in one hour,
271 " fine — 69.4%
119 " tailings

19½ minutes required to sift — passing 2 screens connected parallel so that half went thru each 5 times.

1st screening	— 89 lbs fine	301 lbs tailings	
2nd screening	— 81 lbs "	220 "	"
3rd screening	— 36 lbs "	184 "	"
4th screening	— 34 lbs "	150 "	"
5th screening	— 31 lbs "	119 "	"
	271	119 left	

Moulds clean.

→ see next page

1327-E

92%

OK OK Low - 1-2	OK OK x	OK OK x	OK OK x
OK OK Low - 1	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK Low - 2	OK OK	OK OK x	OK OK Low - 3
	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK	OK OK Low - 2	OK OK x	OK OK Low - 2 - 3
OK OK x	OK OK Low - 1	OK OK x	
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK
OK OK x	OK OK x	OK OK x	OK OK x
91%	100%	100%	91%
58%	75%	91%	66%
83	91		83

1327-E

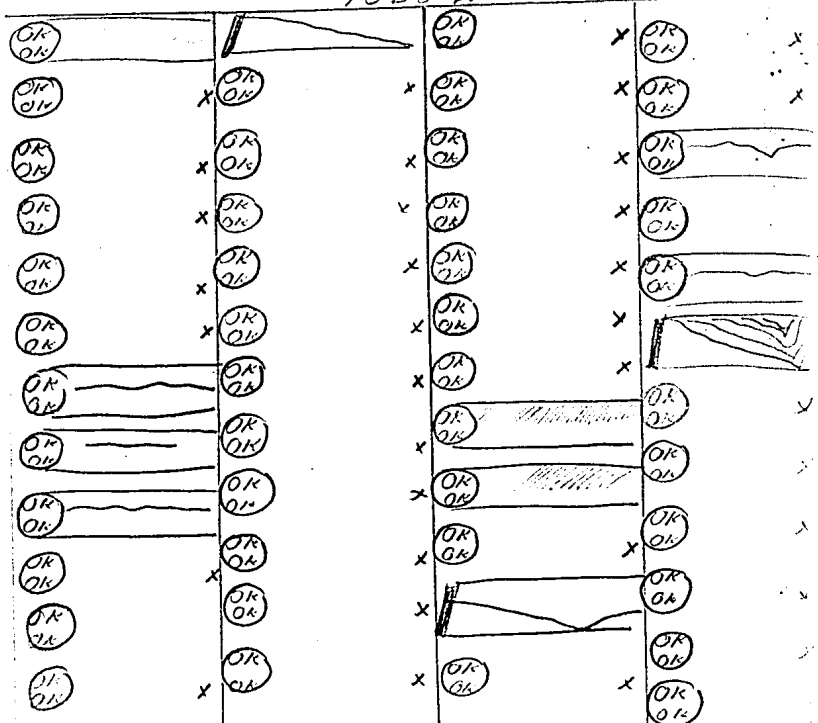
92%

OK OK x	OK OK	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK
OK OK x	OK OK x	OK OK x	OK OK
OK OK	OK OK	OK OK x	OK OK Low - 1 - 2 - 3
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK	OK OK Low - 3
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK	OK OK Low - 3	OK OK x	OK OK x
100%	100%	100%	100% 66%
83%	75%	91%	General Average on 12 Rounds. Corr 94.3% Perfect 75.4%
83	83		

CMJ

9/21/

1328-E



100 %	91 %	91 %	91 %
66 %	91 %	75 %	75 %

1328-E Special Screen –
24 mesh – 28 BWS Steel wire –
on Fuller mill –
Screened 5 times on Telvayge Screen
Mantel – Varnish and Pitch regular
(Same as 1327-E except that the
final tailings must be saved
to be regrinded with 1329-E)

→ See Next page →

92/12

1328-E

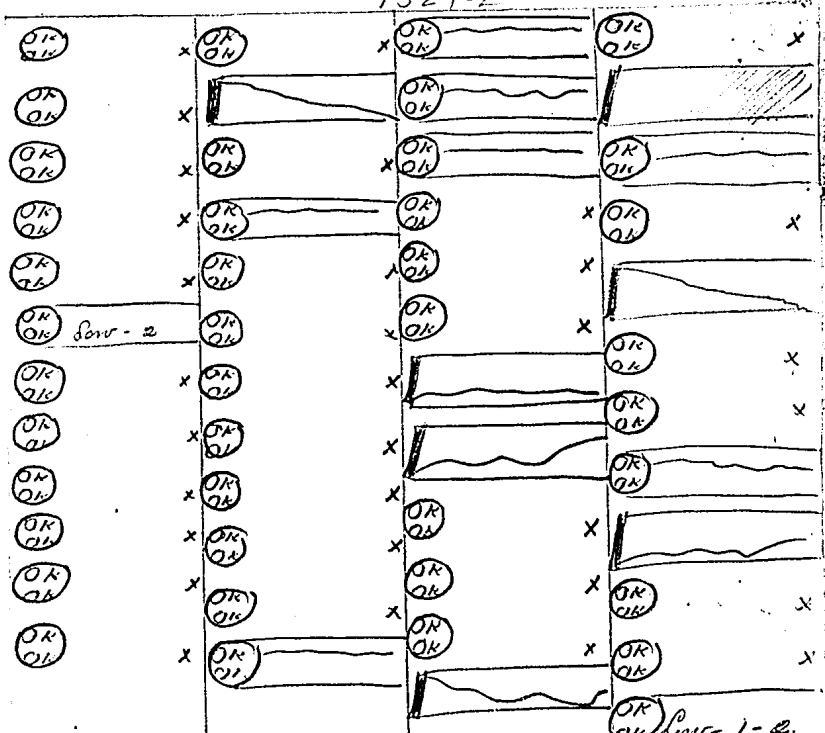
OK OK VEN	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×
OK OK	OK OK	OK OK ×
	OK OK	OK OK ×
OK OK ×	OK OK ×	
OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK	OK OK ×
OK OK	OK OK ×	OK OK ×
		OK OK ×
91%	91%	91%
6.6%	66	91%

General average on Comm. 95.
Perfect 75.

[45]

9/22/12

1329-E



100%	91%	75%	75%
91%	75%	50%	50%

1329-E

Same as 1328-E except that tailings from 1328-E are reground with it.

1389-E

Low - 3

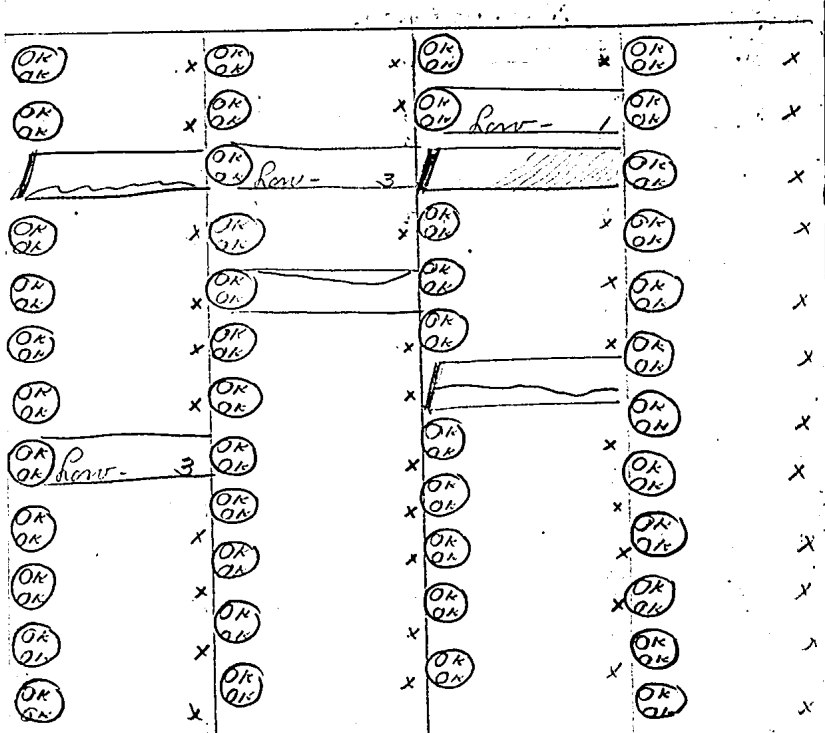
Low - 2

91%	100%	91%	100%
50%	75%	50%	75

Genuine wing
ow. 8 Pom
Corn 88.
Pelect 6 # 4

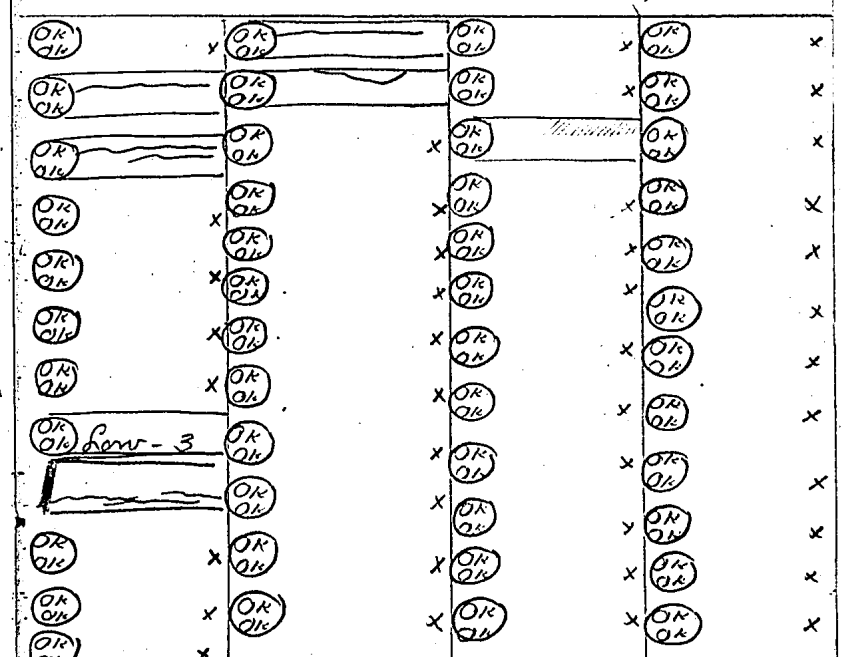
1330-E

9/23/6



91%	100%	83%	100%
83%	83%	75%	100%

1330.E Mr Hoffman
Shellac experiment.
One drier full of powder -
made with all hard black shellac.
Hold sample -
Mould varnish and print regular.



91%	100%	100%	100%
66%	83%	91%	100%

[51]

9/23/6

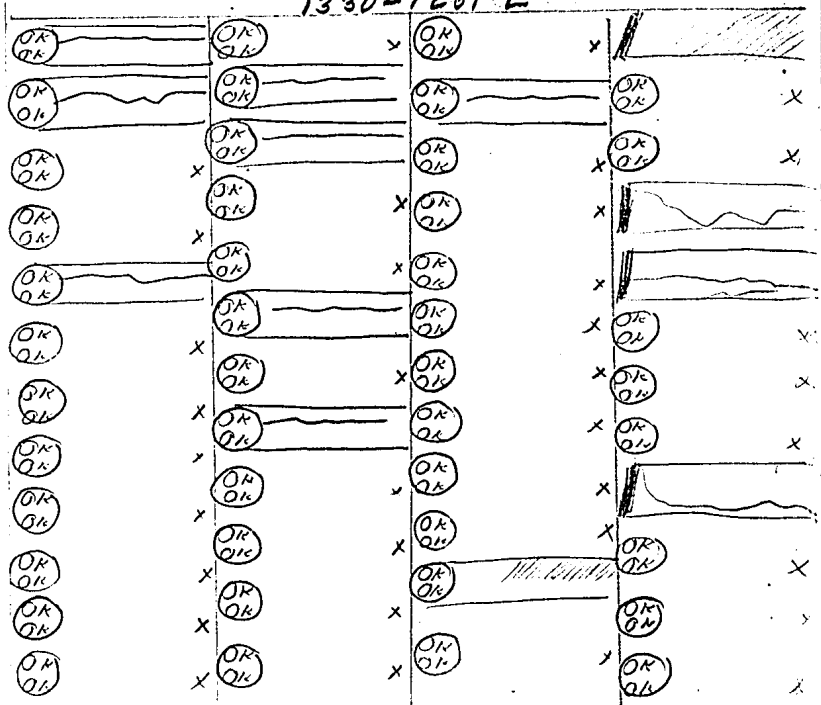
1330-E - 1261-E Schedule

100%	100%	91%	100%
91%	91%	33%	75%

1330-1261-E:

Same powder as 1330 made on 1261 schedule and varnished with 2 brushes -
- 8 rounds -

1330-1261-E



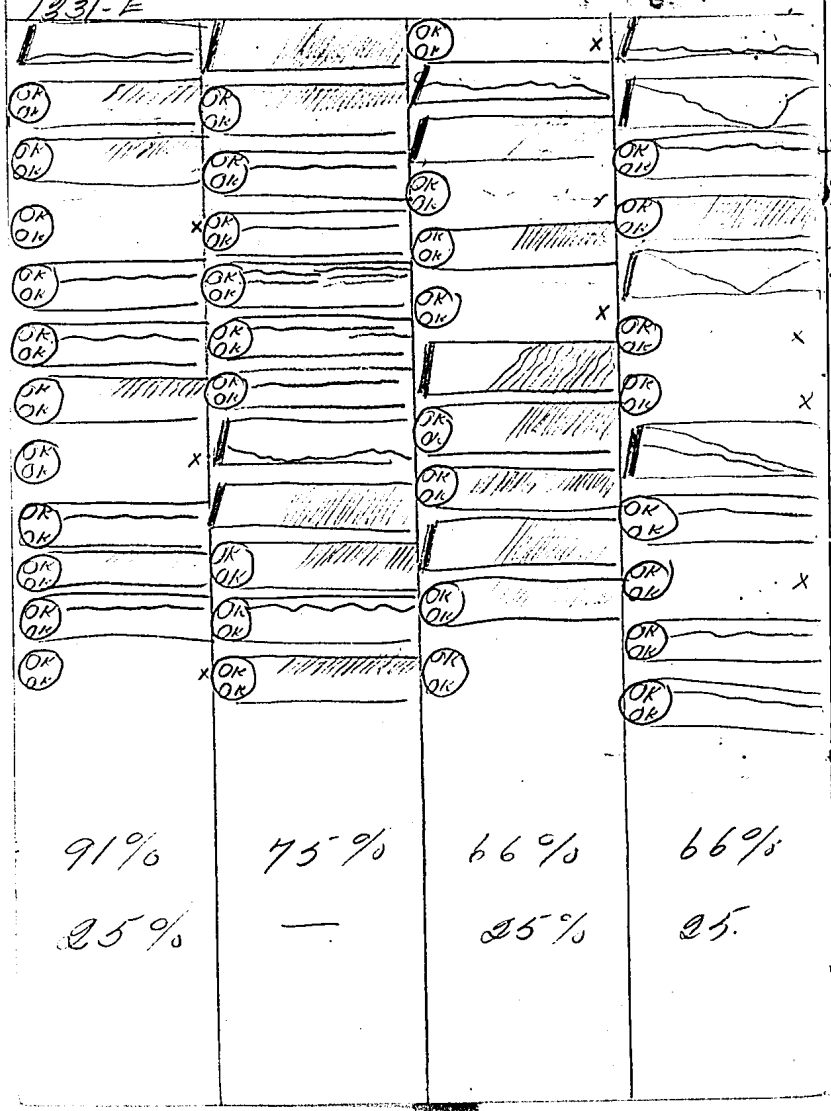
100%	100%	100%	66%
75%	66%	83%	66%

1330-1261-E

C55J

9/23/16

1331-E



91%	75%	66%	66%
25%	—	25%	25.

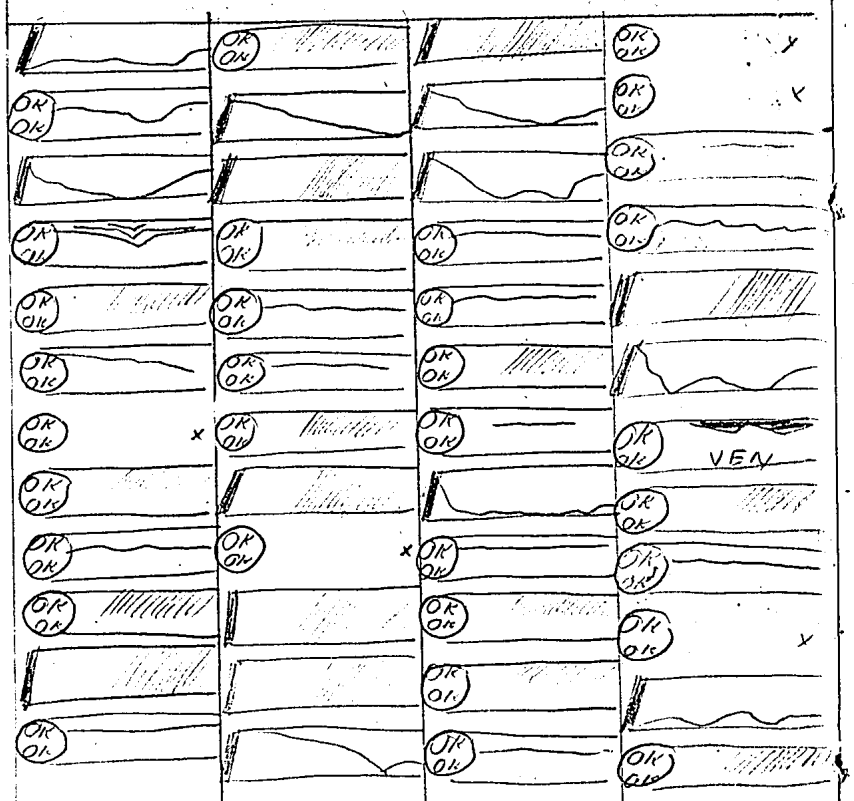
1331-E -

8 rounds regular powder moulded on 1261 schedule varnish 2 brushes - print regular. Regular powder is made from only the (shell) lac with all hard lumps removed, and blanks are running good now.

→ See next page

1331-E

9/23/10



75%	50%	66%	75%
			25%
8%	8%	—	

General Average on 8 Rounds

Conv.	70.5%
Project	14.4%

1332-E

Mr Hoffman will make 4 rounds on 1261 Schedule and send to Mr Kirden

1332-E

Mr Kirden will have corners-sharp edge taken off with a file –
Varnish with all the varnish it will take - 2 brushes –
Print in square edge moulds that have not been used for bevel edge blanks and have corners clean.
Send to Mr Miller in Building 4.

See next page.
for the Experiment

1332-E

1332-E

Date Oct.	Corrs.	Perfect	Round	General Average Corrs.	General Average Perfect
10	97.3	58	4	97.3	58
11	95.6	72.1	4	96.45	65.1
12	98.1	63	4	97.	64.3.
13	100	72.2	4	97.7	66.3
14	100	85.	4	98.2	70.3
15	100	57.3	4	98.5	67.9
16	97.1	63.8	4	98.3	67.3
17	100	68.1	4	98.5	67.4
23	100	85.	4	98.6	69.3
24	98	80.1	4	98.6	70.4
25	97.3	83.	4	98.4	71.6
26	86.2	57.3	4	97.4	69.9
27	93.1	79.1	4	97.1	70.6
28	95.3	76.3		97.2	71

10/10/16

1333-E

OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK

1334-E

Lot - 2			
Lot - 3			
100%	100%	91%	91%
75%	100%	83%	91%

1334-E

Mr Hoffman —

One drier full of swept up powder from around mills — put through basement drier and then screened separately from regular powder first thru final screen then fine screen then final screen again,

1st Final screen
2 Drier 2 hours —
3 Regular fine screen —
4 final screen —

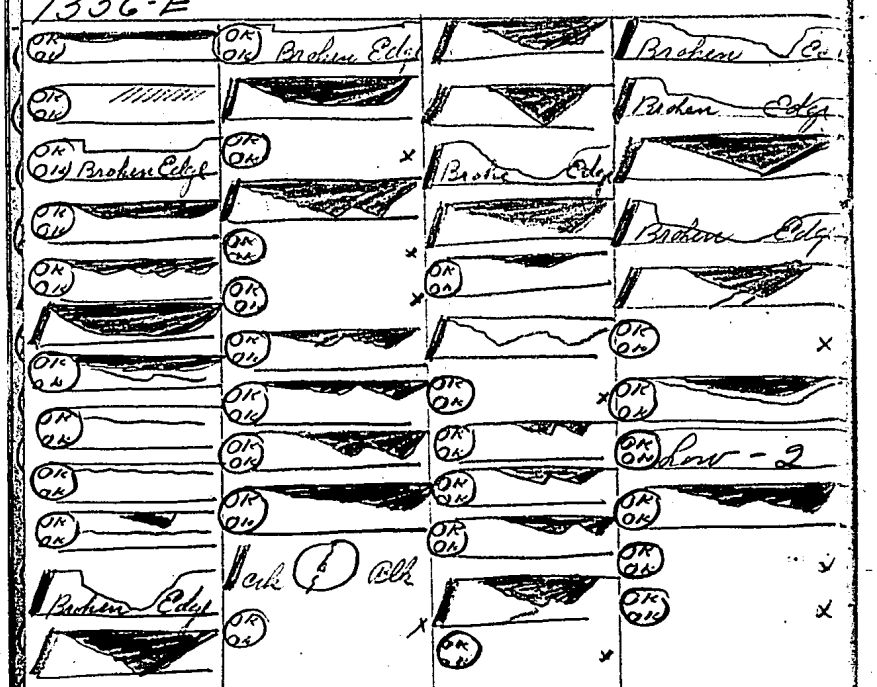
Mould and run thru on regular schedule — varnish and print regular,

(65)

1335 – Mr Kricher –
Take blanks with dry spots before placing in oven and give another coat of varnish on the spots – Send 4 rounds to Miller in No 4 Building.

10/27/1

1336-E



75%	75%	50%	66%
—	33%	16%	25%

1336-E Mr Hoffman —
Powder swept up from around units.
1st Thru final coarse screen.
2 Regular fine screen.
3 final screen again, moulded and run thru an regular schedule —
Varnish and print regular —
Send 4 rounds to Mill —

10/27/

1337-E

		OK	
OK	Bad Bull on Outlab		
OK		OK Low-3	OK
	OK	OK	OK
OK	OK	OK Low-2-3	OK
OK	OK Low 3	OK Low-2-3	OK
OK Low-2-3		OK Broken Edge	OK
OK Low-1	OK Low-3	OK	OK
OK	OK Low-2-3	OK Low-2-3	OK
OK	OK	OK Low-1-2-3	OK
OK	OK	OK	OK
OK	OK	OK	OK
83%	66%	91%	83%
25%	33%	33%	25%

1337-E
four rounds fresh powder
regular in every way,
Send to Miller in Building 4

C71

11/17/6

1338-E

Bubble in Varn	Bad Varn Spot	
OK ok	×	Bad Varn Spot
OK ok	×	OK ok ×
Bad Varn Spot	OK ok	×
OK ok	×	OK ok ×
OK ok	×	OK ok ×
OK ok	×	OK ok ×
OK ok	×	Bad Varn Spot
OK ok	×	OK ok ×
OK ok	×	Bad Varn Spot
OK ok	×	OK ok ×
OK ok	×	OK ok ×
83%	66%	
83%	66%	

1338-E

Mr Kircher:

Please varnish two rounds (24) regular blanks first with one coat varnish and after it dries apply another coat before placing in oven.

Print regular and send to Miller in Building 4 —

1339-E

11/29/

OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK Low - 3	OK OK x
OK OK x	OK OK x
OK OK x	OK OK Low - 3
OK OK x	OK OK x
OK OK x	OK OK Low - 2
OK OK Low - 1-2-3	OK OK x
OK OK x	OK OK y
OK OK Low - 3	OK OK y
100%	100%
75%	83%

1339-E

24 blankets with low spot due to bushings varnish and print regular - sent to Miller in Building No 4 -

1340-E 11/19/16

75%	66%
50%	41%

1340-E

One quart regular 1511 varnish without lamp black – viscosity 1m 25 sec

This varnish to be used on blanks that have been varnished in regular way ready to go in the oven, so that the blanks will have two coats varnish – one with lamp black and one without.

Print regular and deliver to miller in Building 4

To be examined for surface as well as other defects.

1340-E-3 Same but 3 min viscosity.
1340-E-2 " " 2 min "
1340-E-1 " " 1 min "

See five pages back in regards to these three Experiments

1341-E 11/20/16

OK	OK	OK Low-3	OK	OK
OK Low-2	OK	OK Low-3	OK Low-2	OK
OK	OK	OK	OK	OK
OK	OK	OK Low-1	OK	OK Low-3
OK Low-1	OK	OK	OK	OK
OK Low-1	OK	OK Low-2-3	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	OK	OK
OK				
100%	100%	100%	100%	100%
75%	100%	66%	91%	83%

1341-E

Mould 8 rounds regular way except leave off the 1/8 soft rubber sheet in press.

Varnish & print regular and deliver to Miller in Building 4

OK Low-3	OK	OK
OK	OK Low-1-2	OK Low-3
OK	OK	OK
OK	OK	OK
OK	OK	OK
OK	OK	OK
OK	OK	OK
OK	OK	OK
OK	OK	OK
OK Low-2	OK	OK Low-3
OK Low-2	OK	OK
OK	OK	OK
OK	OK	OK
100%	100%	100%
75%	91%	91%

1342-E

11/2/16

OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK Grey Spot	
OK OK	x
OK OK Low - 3	
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK Pull Outs Label	
100 %	
75 %	

To be held & tested by Mr Edison

Retested Nov 27, 1916 by Mr Edison
to be retested Feb. 27, 1916 by
Mr. Edison

1342-E

Print over Varnish Enough for 24 blanks. Varnish same as regular Except 8½ 6/4

Varnish blanks & bake regular way - print one scrubed.

1- very cracking & hard general
2 " "

3 cracking & hard general
4 "

5 hard general
6 cracking hard general -

7 hard general - cracking
8 fair "

Not a good surface among these all very bad

C813

1343-E 11/21/16

Ok Ok	x
Ok Ok	x
Ok Ok	x
Ok Ok	x
Ok Ok	x
Ok Ok	x
Ok Ok	x
Ok Ok	x
Pull Out ammunition	
Ok Ok	x
Ok Ok	x
Ok Ok	x
91%	
91%	

To be held & tested by Mr Edison

1343-E

Duplicate of 1342-E but 9½ 6¼ —
Print one round

1344-E 11/30/16

OK OK ×	To be held & tested by Mr Edison
OK OK ×	
OK OK ×	
OK OK ×	
OK OK ×	
OK OK ×	
OK OK Low - 2	Test Nov 27, 1916 by Mr Edison to be retested Feb 27 1917 by Mr Edison
OK OK ×	
OK OK ×	
OK OK Low - 3	
OK OK Low - 3	
OK OK Low - 3	
100%	
66%	

1344-E

Duplicate of 1343-E

But 12 - 6/4

Print one round.

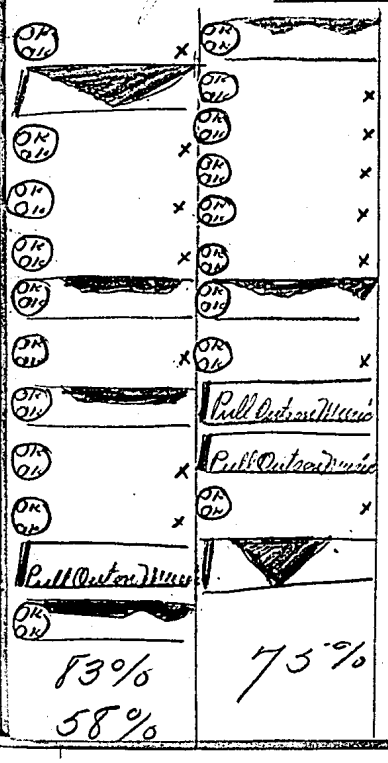
1 Very loud Crackly & general
2 fair general - in fact good - no cracklets -

3 Loud general not great.
4 " " "

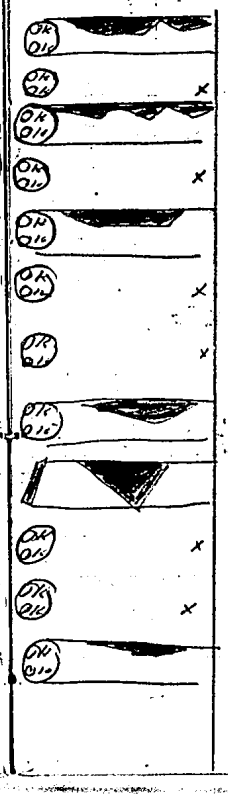
5 Loud general - Crackly
6 Horribly general & surface & Cracklets -

[85]

1345-E #1 Same as 1340-E
Only 1 minutes Viscosity
Yes 24 Blanks & print
regular way sent to
Bldg # 4



1346-E # 3 Same as 1340-E
Only 3 minutes Visc
Yes 24 Blanks & print regular
Way sent to Bldg. # 4



1347-E

Make up a large batch of Peabody Garnet Lac.

There is one bag. use it all - make all into blanks.

Note any differences between garnet & regular TN - Inspect blanks well and run thru factory. Have records inspected.

72.9% passed

Eyr. Mechanical

613

parallel Cks 100

Radial. 32

91% of Total 2123 OK —

1348 E

Make 1/2 dozen blanks
with old small brush
one coat, bake Reg
Print one record from
the test master mould
on one blank, save the
other blanks —

1349 =

Peculiar thing about this is large Pull out in Labels —

This should be easy to Eradicate —

Probably not enough fibre to give strength Enough to withstand the deep Malta pull —

Apparently no improvement in general surface which is strange

1349 - E

Make up one (drier full) lot of blankets 4 chalk 3 fibre 1 lack.

Save 50 good ones for Edison — Run balance thru Reg & have % inspection

69.3 % passed

Eye Machine & formal

345 Records

Pull in Labels 27.5

Parallel Cks 5

no radial

Drop test 7-8-20-4-13-9- (61)

This is good Enough

1350 E

Varnish 6 Reg blanks
Reg bake,
Use Varnish marked
China - ~~the~~ shake it
well before pouring in
Cup -
Sends blanks to Edison

Print on test machine
The surface was very
soft - 8% China Clay

[95]

1351-E

Curious - Blank yellow
fosi - print sounds about
regular perhaps little
more scratch -

No lumps at all

Considering Cutting silica
not promising as doing
away with scratch

Record looks OK

1351 E

Varnish 6 Reg blanks

Use varnish marked

Kieselghur - shake it

well before using

Bake Regular

Send blanks to

Edison

Print from test master

Nov 28/16

1352 E

Tried putting Neg Varn on - Celluloid & printed - it stuck to mould only 1/3 stuck on Celluloid - This not good - as it will not stick -

One was good - This is being grafted & moved made -

Print it

1353 E

Varnish 6 ~~record~~ blank with Var
marked No black.
Bake Req—
Send to Edison

The scratch is about normal
but its Very Sharp hence
more noticeable,

Phenomenon

[101]

Make Varnishes with
Carbo Lime
Magnesia -

1354E not tested yet

1354 E

Reg varnish without Lampblack
to which is added 5% by
weight of fluffy Lampblack
made by Smith & mixed in
Spenning Chemicals mixer

Varnish & blanks -
from Battle marked Smith black
Reg way & bake reg
Send to Edison & tests no better
than Reg black black
~~The above varnish Reg~~
~~black fluffy lampblack~~
~~but of how black is made~~
~~Chemy~~

1355 E

Peculiarity of this is -
absence of parallell Cracks
& Excess of radial Cracks.

1355 E.

One drier full powder - first
Mix dry (without shellac gum) in mixer
wood - chalk and lamp black.
Then grind in large Fuller mill
Then mix with gum regular
Dry grind and screen regular -
Mould regular - Keep record of
inspection - print regular two
rounds on new moulds,
Hold two rounds unvarnished -
Print others and keep record of
inspection,

~~Tried 1 brake 17 shapes~~ -

84.4 % passed

Eye - Mechanical & formal
366 Records
PO in labels 12
Radial — 26
parallell 1

1356-E Smith Lampblack
Varnish 6 regular blanks
print 2 and send others
to Mr Edison in Bldg. #4

~~Nelson~~

1357-E

Minwax Plain Varnish 2

Mark with this Varnish Regular
varn + take to Compact.—

This is regular Var, which is in little
pot with Spring finger to break
clots of lampblack

Print 2 + Send to Mr. Edison
in Building # 4

~~N. C.~~

Surface of blanks not near as good as regular
29 made 15 Discards - 5 were cracked 10 had pull outs
~~off~~ 14 sent up stairs to Varnishing, after Varnishing
5 more developed Cracks. One selected for
Printing which was OK gave crack after
Printing - The blank itself Cracks, OK
around Edge — Edge shiny all around for
1/4 @ 3/4 wide, poor loading for the most
blanks Cut much harder than reg
Dropped 2 both went 20 drops

Music much louder than Reg + scratch no
more if not less than regular

In strike off at loading hopper powder seems
to pull apart, powder packs form in small
press 3/16 strike off - on turntable powder
pulls apart on turntable strike off Leaves mouth
Cloudy + dirty

The secenate may have more contraction
than Resin alone may be reason
blanks Crack -

1358 E

Hoffman

Make 50 blank batch

Run 4 Rounds Varnished
Regular Glycol X Lampblack
Varnish — Send to Edison

Wood $28\frac{1}{2}$ lbs
Chuck $21\frac{1}{2}$ lbs

Var

10 lbs Resenate X - Lower Oil, Double decomp
35 lbs alcohol -

surface of blanks not as good as Reg —

In strike off at loading hopper, powder seems to pull apart. powder packs form in small piece - 3/16 strike off strikes off fair — leaves mounds cloudy & dirty —

23 made - 9 Discards — 6 cracked 3 pull outs 14 ok —

After Varnishing 2 more developed cracks

Surface as good as Reg but dont seem as good as 1358 & no louder than Reg 2 Dropped balls broke at 17 Drops — 1/4 of Edge shiny

Cks —

shows 1358 & 1359 E dont have proper loading — too hard around Edge which probably Cause of blank Cracking —

1359 E

Dup of 1358 E

Except plain Resin —

1360 E

Varnish phosphate Zinc
in place Lamp & Cock
12% to Var
Var 6 print 1 on
test moved

Ng + Rough opals

Phos Zn is very fine leaflets

[115]

1361 F

Varnish over second
graphite - 12% of the Var
175 Var
21 grms graphite —

About same as Reg
no gain — scratch just as bad
fairly black not as
much as Reg

1362 E

Surface fairly good but smooth ~~[illegible]~~ mould little pinnes Chip out they probably Crack by pressure + chip out Sizes about 003

Too much lamp black makes it brittle

Same with Castor oil also brittle, but smoother I think

1362 E

Var with 10% Smith Lampblack –

Var 6 print 1 on test print

175-gms Var 17.5 black

Blank when varnished shows a Continuous surface without depressions or holes – but shows ~~[illegible]~~ a fine cloth all over –

While the 1368 with same amount of Smith black but with 5 grams Castor oil in 175 gms Var is almost like a Crkenofer + VERY few specs –

1363 —

Cuts slightly so as to make sharp snap on smooth surface rather sharp — not [redacted]

1363 E

175 Varnish
26 grams Lampblk

Var with 15% of the Var of Smith Lampblack —

~~Dried~~ Var 6 permit 1 with tail mould

~~1336~~ 1363½

Cuts — general surface not so sharp as Reg —
Varnish goes on very bad
too much Lampblack

1363½ E

dup of 1363 E
Except 20% Smith (Black)

1364 E

Varnish - with
12% of ferrous phosphate
Var. 6 - panel 1 with
test mould

made
Varnish - very lumpy -
black -

This gives a rather loud
surface & no advantage

1365 E

China clay we have has got in it — this I removed by Levigation also found full spread of wood that floated — This can be got out by following Item 3 or 4 thickness of cheese cloth after clay is suspended in water.
This batch after pouring off water after settling I added large amount of Alcohol & filtered took 10 hours & dried on plate lumpy — but took a lump put in alcohol & shook vigorously all floated & is very easy to settle out.

1365 E

Van with 20% of purified China Clay
Van 6 — permit 1
with test mould

175 grms Van
35/grams, this is 20%

Results — Very bad Varnish pulled out & checks & very irregular Cocoon
Too much China Clay
Wants about 5% probably
3 or 4% better as 5% was best yet —

[125]

1366 =

The making of Resinate

This works fairly well - it dont go solid like little Experiment

12 lbs Rosin took up 2 ½ lbs of Magnesia, when got very thick - Even with high temp

Dont think all Mg has combined

It stayed quite liquid with 2 lbs, after pulling in little more it suddenly changed color to deeper red.

This seems to be the point when it starts to rapidly thicken.

Rosin was not strained, full black chips, must use higher grade & strained

Pressed 3. one had pull out — Surface soft + very open

PROMISING — Good results

The 3 were on old moulds & mean changed all chemicals up yet necessary

1366 E PROMISING

50 blanks ~~[illegible]~~.

Dup of 1358 except

Use Rosin melted + feed with Carb Magnesia till melting point goes way up —

only 3 OK

Blanks 1½ lbs out of 13½ lbs resinate used was unsolvable, the free MgO + resinate ground powder 96½% 1 lbs 150 mesh powder tears in strike off — 3/16 strike off

Moulds dirty —

36 Blanks made 23 were pull out 10 cracked — The schedules must be changed to make this work — Sent PO to Mellon room

1367-E

After process made go afore in Cani —

97% Born 180 -
pks ok 1/4 strike off

Lenoxo Manuels duty
6 made 3 discarded for
pull outs —
if this can be solved
its pronouncing

1367 E

50 blanks —

Dup of 1358 Except

Manila Copal wood
Except 8 lbs Copal 35 lbs Alcohol

Manilla Copal dissolves very easy in alcohol,
Congo Copal dont dissolve about 1/8 of it dissolves & the insol part is tough & very flexible when moist with alcohol & like Rubber. This may be good for a lot of things by thoroughly removing the resin by alcohol

Phenomenon

African Copal is all this flexible stuff & think

1368 Made

175 g Var
5 grm Castor oil
10 grms Smiths black

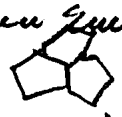
The Blank is very black & shining — Has a fine concave surface without holes or depressions — & very few specs as compared with 136 z which is same without Castor oil —

Phenomenon — Evidently Castor oil in Var prevented blank from soaking up Var & the whole is on the surface — BOSS if it will prove a good surface —

Perhaps Glycerine will do same thing — Point fairly smooth but smooth side chips off by reproducers NG

1368 $\frac{1}{F2}$ F

175 grms Reg Var 10 grms Smiths Black — 17 grams Castor oil —

Rough, looks awful — pulls out on smooth side of record — Its an emulsion or in micro chaos  like honey Comb — Cuts — NG — not promising Castor oil NG —

1369 = seems a little softer than Reg. but has apparently more Cracks —

Smooth side has also checks at certain places —

Looks favorable for surface.

V

1369E

Hoffman

Make 50 blanks.

28 ½ lbs wood fibre
21 ½ lbs Chalk
7 pounds of clear Rosin
30 lbs. alcohol —

Keep inspection sheet send them up to 6E Varnished Reg — one to 6E printed + one blank cut to Edison

Hoffmans Report = ground 97% fine — 180 powder packs good — packs from in small press, shows lifts when rubber pad taken off 3/16 strike off — leaves moulds provided but clean — 34 made of debris
8 pullouts 2 Cracked 24 OK
70.5% OK

1370 - Considerable better than Regular in appearance of General - quite not so loud or sharp as Reg - Dont Cut on smooth side - looks favorable -

1370 E

Hoffman

Make 50 blanks with Regular Shellac Varnish

Use
28½ lbs Wood
21½ lbs of China Clay

make Inspection report, send up stacks to be Varnished print 1 & send 1 blank to Edison -

Hoffmans Report - ground 96% thru 180 powder bonds good - packs form in small pieces, shows lefts when rubber pad Taken off 1/4 strike off - leaves mould dirty both top & bottom -
31 made 12 pull outs - 1 machines defect
180K - 58%
lost some fine powder in sifting

C(115)

1371 E

Music shade louder
general surface shade
more soft than Reg
Smooth side much
softer — no cutting 3 times
over

1371 E

Hoffman

Make 50 blanks —

28 ½ wood fibre
21 ½ lbs China Clay
Varnish
10 lbs of Rosin + 35 lbs
Alcohol —

Hoffman Report — ground 96% through 180
powder loads good packs firm in
Squeall press — chows left colon rubber
pad taken off 3/16 strike off —
leaves moulds dirty on top plates
made 14 — lost lot of Clay in mixing
9 pull outs — 5 OK 35.4 %

1372 E

Varnish without Lampblack
175 grams -
17½ grams China clay
5 grams Castor oil

Shade after General Chart
Req — The smooth sides
Cuts very bad — too
much china clay —
Castor oil preferably
ng = Emulsion

1373 - Rougher Chau
Req - Very Good Varnishing
Cuts both ends NG

1373 E
Varnish without Lampblack

175 grams
14½ grams China Clay
15 grams Castor Oil

1374 E

Hoffman

Make a 50 blank batch

4 wood, 3 China clay 1 Rosin

Make only 6 blanks save the balance of the powder

Send 6 up to be varnished & baked regular - One to be punched & other 5 sent to Edison If the first 6 are heavily all Dad send up what you get out of 6 made

1375 E

Dup of 1374 E
Except 3 wood 4 China Clay
+ 1 Resin —

[145]

1376 E

Varnish - 175 grams -

20 grams of Paramedophenol Base

Varnish 6 percent 1

Full of spots not filled - bubbles

too much paramedo

Then making one with

only 8 grams

1377E

Varnish — 175 grams —
20 ~~g~~ grams of Paraphenylenediamine

Var to print!

full halos due to bubbles in
Varnish - too much
Paria — an machinery
one with only 8 grams
surfacefoam - 8 may be
grams

1378E

Varnish 175 grams —
20 grams Hydroazobenzol.

Var 6 — print 1

Surface accus louder than
Reg — Smooth side
shows lots yellow spots
as of bubbles under
Blank shows very bad
bubbles — too much
Hydrazo

1349 —

Long long ago horrible
Crackels - smooth steel
shows the pits seen in
the working Moulds in
Clancys room some days
ago —

Flora Bella good surface —

{ of 358. inspected 93.3 OK —
{ Second lot of 571 88 1/2 % OK
total 929 — 90.1 % OK.

~~[illegible]~~
Best 33 of discards was
pull out in Old Kubals — 2'

1379 E

Make a Dryer full 800.
Regular powder Except One
& two tenths parts of Dextrine
I think from the fine surface
on our Clankes that our regular
mix is too dry — That our
Condenser works better &
dries powder too much &
it needs more Lac

Send up & have special
report made on this
lot Send 1/2 dog seconds
to Eaton

6 printed all ok mechanically
surface reg Crackels depends
on state of moulds

1380 E

ground 96% thru 180 powder
tears apart in strike off —
packs from in small pieces
chaos lifts when rubber pad raised
3/16 strike off

Leaves moulds frosted & dirty 32 made

22 pull outs all deserving

If pull outs got rid of would be OK

printed 10 — 1 broke in

Surfaces about like Reg —

This is PROMISING

If can stop sticking "Tanning Solution"

I propose diluting Condensate Can twice back alcohol paint lip & bot moulds & stand 5 min then make blanks

1380 E

Make enough powder

50 blanks —

28½ wood

21½ Chalk —

6 lbs Rosin — 10% Ester

27 lbs Alcohol

Make them all up into blanks

20 g. stannous chloride per gallon denat alcohol used to wash copper moulds stops sticking absolutely.

100 g. stannous chloride per gallon denat alcohol used as wash on powder blank moulds stops sticking on blanks absolutely.

1381-

Printed 3 on Reg Moulds
Surfaces not very good
as fine swaps so numerous
on moulds they coalesce into
good surfaces & make it
louder -

Made & printed 12/8/16
inspected 1/29/17.
4 prints all OK. 2 Blanks OK.

1381 E

Printed 12-8-16

Var 175 grams
10 grams finely powdered
Resenate of Lead -

Much softer than Reg.
Blank is a phenomenon, its
beautifully shiny glassy surface
scarcely a piece shows a crack, air
spot, its absolutely continuous
like and Excellent blank
This is Very PROMISING

FINE

1382 E

Varnish

175 grams —

8 grams China Clay

Var 6 permit 1

Little more scratch
than Reg — has more
Crackle — Smooth side
however is pretty good
better than Reg
Blank very Clotting +
dull like Reg

1383 F

Varnish

175 grams

6 grams chinaclay

Var 6 - percent 1

Blank looks different from others Var appears as if it had all gone in the blank

Thinkscratch is little more than Reg - It dont seem as loud as Reg -

C1613

1384 1/2 E

Varnish

175 grams

5 grams Smiths

Lampblack

Vac 6 permit 1

Blanks look shiny all over but not near as good as 1361 for surface, more depressions & blots now within but its next to 1381 in looks

Very good surface, soft only few craze - much lower volume to surface

This is getting near to what is wanted VERY PROMISING

1384E

Varnish

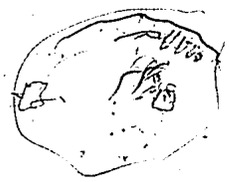
175 grams

8 grams Paramedophenol Base

~~[illegible]~~ Varnish le percent 1

This gives a better surface than the regular less oil & softer — both on test mould —

There is something with this —



(165)

1385 F

Varnish

175 grams

8 grams

Paraphenylenediamine

Vac 6 percent 1

Not as good as 1384 –
but about same as Reg

1386 F

Varnish

175 grains

8 grains Hydroazobenzol

Not quite as good as 1384 but better than Reg —

Both 1384 & 6 on 2nd time over make enormous reduction in general surface

1387 E

Van

175 grams —

8 grams of very finely powdered all from 180 mesh

Chloride of Ammonia

Cuts —

Rollers full

halos — dont

fill rough spots

nearly flush with

shiny surface

UG

CTW

1388 E

Var
175 grams
16 grams of Champhor

general surface soft - good
VERY Promising -
Blank - shiny at start with shrunken places - as you go in Var, draws in to globules - This is bad
The surface is apparently better than 1381 but I fear the tannish will not act long

See Book 20 for Continuation of tests

Square Edge Blanks

Date	Conv.	Perfect	Rounds	General Average Conv	General Average Perfect
Oct 14	87.9	85.	20	92.0	80.
16	88.7	77.5	20	91.9	80
17	95.	87.	20	92.	80.2
18	97.5	97.	20	92.2	80.8
19	97.9	92.4	20	92.3	81.1
20	92.7	76.	20	92.4	81.
21	90.4	77.5	20	95.2	83.2
23	98.7	95.4	20	92.5	81.3
24	87.9	67.5	20	92.4	80.9
25	87.9	71.6	20	92.2	78.8
26	89.5	73.3	20	92.2	78.6
27	85.4	67.5	20	92.	78.3

Bevel Edge Blks.

Date	Conv	Perfect	Rounds	General Average Conv	General Average Perfect
Oct 14	98.7	97.5	20	87.4	76.8
16	89.1	84.1	20	87.5	77.1
17	92.4	89.1	20	87.6	77.5
18	97.5	15.	20	88.	78.1
19	95.8	92.1	20	88.2	78.5
20	56.6	50.4	20	87.2	77.6
21	70.	63.7	20	89.7	79.6
23	82.5	77.	20	86.9	77.2
24	77.5	68.7	20	86.6	76.9
25	93.3	90.4	20	86.8	77.3
26	81.	80.8	20	86.8	77.4
27	93.7	90.8	20	87.2	

cont.

Square Edge Specials [illegible]

Date	Conv.	Perfect	Grade	General Average Conv.	General Average Perfect
Sept 13	95.	85. 3	20.	95.	85. 3
14	77. 9	61.	20	91. 4	73. 1
15	88. 8	69. 1	20.	90. 5	71. 8
16	88. 7	54. 1	20	90. 1	67. 3
19	83. 3	60. 4	20	88. 7	65. 9
20	93. 7	83. 3	20	89. 5	68. 8
21	91. 4	86. 4	20	89. 8	71. 3
22	88. 7	74. 1	20	89. 7	71. 7
23	96.	80.	20.	90. 3	72. 6
25	97.	93.	20	91. 05	74. 6
26	95. 4	88. 7	20	91. 4	75. 9
27	89.	86. 6	20	91. 1	76. 8
28	82.	71.	20	90. 3	75. 5
29	94. 5	83. 3	20	90. 8	72. 5
30	91.	72.	20.	90. 8	76. 5
Oct 2	97. 9	94.	20	91. 3	76. 2
3	96. 2	92.	20	91. 5	77. 3
4	97. 5	97. 1	20	92.	78. 1
5	96. 9	96.	19	92. 2	78. 9
6	86. 3	85.	19	92. 1	80.
7	93. 3	83. 3	20.	92. 5	80. 3
9	94. 5	62. 9	20	91. 6	80. 4
10	96. 2	93. 3	20	91. 7	79. 6
11	84. 1	72.	20	91. 9	80. 2
12	90. 8	66. 2	20	91. 9	79. 6
13	99. 1	95. 4	20	92. 2	80. 2

Pearl Edge [illegible]

Date	Conv.	Perfect	Grade	General Average Conv.	General Average Perfect
Sept 13	90. 8	83. 3	20	90. 8	83. 3
14	87.	72. 9	20	88. 9	78. 1
15	75. 4	55. 4	20	84. 4	70. 5
16	86.	64. 5	20	84. 8	69. 0
19	90. 8	82.	20	86.	71. 6
20	99.	91. 6	20	88. 1	74. 9
21	96	91.	20	89. 3	77. 3
22	98. 3	92. 9	20	90 4	77. 7
23	82.	66.	20	89. 4	78. 2
25	79. 4	43. 3	20	87. 5	74. 2
26	93.	90. 4	20	88. 7	75. 7
27	92. 4	87.	20	88. 4	76. 6
28	75	49. 5	20	87. 4	74. 6
29	69. 5	48.	20	86. [illegible]	72. 7
30	87.	70. 4	20	86. 1	72. 5
Oct 2	87. 7	57.	20	86. 3	71. 5
3	97. 9	93. 7	20	87. 2	72. 8
4	97. 9	94.	20	87. 6	74. [illegible]
5	88. 3	77. 1	20	87. 9	74. 3
6	60.	46. 6	20	87.	73. 4
7	85.	83. 3	20	86. 6	73. 9
9	66. 6	53. 3	20	86. 5	74. 3
10	96. 6	95. 8	20	85. 7	73. 4
11	94. 5	93. 4	20	86. 1	74. 3
12	97.	95. 4	20	86. 6	71. 5
13	97. 9	97. 5	20	87.	76.

Report on Blankets Made Daily

Oct.		Oct.	
13	14209	14	20470
14	[illegible]	16	21276
15	14296	17	22202
16 Day	9599	18	22.635
18	[illegible]	19	
19	[illegible]		
20	[illegible]		
21	13445		
22	20403		
23	14897		
25	18262		
26	20423		
27	17342		
28	14509		
29	18523		
30	17.945		
[illegible]	20416		
3	20047		
4	20119		
5	19725		
6	19.536		
7	19403		
9	18966		
10	20.770		
	21.112		
12	20937		
13	20276		

Records to Baldwin

Sept		Oct	
12.	13128	13	16384
13.	11994	14	8894
14.	15045	16	16.372.
15	11831	17.	17.030
16	8075	18	17.025
18	13351	19	16,222.
19	13125	20	14856
20	13131	21	8106
21	14518	23	14224
22.	15153	24	13587
23	7.903.	25	13579
25	15.240	26	15596
26	15714	27	14,934
27	16.078	28	8170
28	16551	30	12171
29	14901	31	15,183
30	9488	Nov	
Oct 2	16330	1	16.214
3	14972.	2	17.609
4	15834		
5	15856		
6	17.136		
7	12.343		
9	17133		
10	17.016		
11	17034		
12	17048		

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 20
Notebook, N-16-11-30

This notebook was used by Edison during the period November 1916-March 1917 for notes on experiments to improve the surface quality of disc records. There are also notes by William W. Dinwiddie, Archie D. Hoffman, and possibly other experimenters. The entries describe a sequence of experiments numbered from 1389E through 1471E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients, including rosin, wood flour, various metallic "resonates," china clay, and a white clay provided by Charles Edison. Some tests involve variations in varnish preparations, their method of application, and the molding processes involved in disc record manufacture. Flaws and successful results are both noted. The first entry is dated "Thanksgiving Day—1916 Nov." Several entries indicate that Edison was "deaf today" and temporarily unable to judge test records for surface noise. Some notes are in the form of instructions to Dinwiddie, Hoffman, or other employees. In one entry Edison scolds his two assistants, complaining that "this kind of exptg is d--d poor." The front cover is labeled "Disc Records" and "20"; the back cover is marked "Records & Scratch." The pages are unnumbered. Approximately 120 pages have been used.

Thanksgiving Day – 1916 Nov —

Varnished reg blank Reg 1 Coat Reg
brush reg coat + bake used Reg
Var except Lampblack omitted + 12% Kieselghur substituted, This on drying gave light yellow surface, Surface about like Reg Used a tune discard master turned down –

Same Reg Var Lampblack omitted –
This surface while no louder than Reg was sharper + more hissing than Either Reg or Kieselghur

Same Var but China Clay substituted for Lampblack – This blanked looked black, it was more clotted than even reg Lampblack although China Clay in Var is not clotted,

The surprise of this Varnished was that blank black, also rough surface + yet record is even lower in Volume

(1)

than Either Reg or Kieselguhr and very much softer, This appears to be a very noticeable improvement there was 12% China Clay added of the Varnish (1e) 100 Var 12 Clay
The Viscosity of Var dont seem to increase in either case of Kieselguhr or China Clay - both work well with the brush, + blunt scraping with knife gives long charring - Reg + Kieselguhr dont do it.

Kieselguhr settles out in free mountains + presumably China Clay, although latter cant be seen -

From these Experiments it shows there is a chance to improve the surfaces by finding the right filler - + I will now make a great number using 10 15 + 20% or more filler

Made some Reg Var using Lampblack made on water cooled wheel (rotated) made by Smith there is very black + bulky no cloth made from City gas - mixed it in Chamois Pad

rotating mixed — This is perfectly mixed, Varnished section after blank dried shiny black not grey weather hardened surface like Reg Lampblk but a continuous fine glistening surface no hackles or lumps

This of lampblack is the thing is perfect —

Get bottle Var in Tec chest for use tomorrow at many little cut but tube shake up — & make 6 blanks

1501

Resinate Magnesia blank, small

5 Resinate Mg 12 cc alcohol —

use 20 wood
15 chalk.

This dampens mix ok. + stiff lapathies

Ferrous phosphate very fine smooth, appears to be crystals of mica form leaflets this should be good -

Starch is round transparent particles very fine 1/2/1000 soft to touch -

Zinc phosphate very fine flat leaflet, feels like graphite -

ZnO very fine smooth not leaflets -

NO2 Resinate Magnesia

24 cc Alcohol
10 grms Resinate Magnesia

20 grms wood fibre
15 " Chalk

Think this has too much Resin it lumps in drying some

This presses at 300 lbs equivalent to Reg-Oil & it appears strong -

At 600 lbs on regular press it is very hard & strong tried Cant break it - shows up Much lumps of resin - badly mixed -

#1 at 600 lbs Cant be broken Either,

Manila Copal (pale)

No 3

20 wood
15 chalk

Var 12cc Alcohol
5 grams Copal -

Evidently the Alcohol has not been driven out of the Benzene or Magnesia + it acts better than it would when dried in Vac drier, it may want a little Castor oil to make it less brittle after alcohol all gone, Castor is sol in Alcohol

Took 40 grams Rosin,
Melted it Cooked off water
then added a little at a
time of Carbonate of
Magnesia — gas came
off showing Combination
finally when 1.3/10
one + 3/10th grams —
grammes was in the
Melting point suddenly
rose + the whole went
solid, + dry looking
lumpy — 24 probable
Condensing the alkali

New gum on Market —
African Copal
Nice looking gum clear
Scheel & Co handle 8 cents
lbs plentiful —
Insol Alcohol
on hot plate dont melt
softens to a Tough Rubbery
substance, like old
Zanzibar Copal —

acting Calyfulically - to
change the fusion quality
to a certain Extent
sufficient to raise
its BP tremendously
& condenses just like
Shellac & Linseed
when heated very
hot =
It has no sticky properties
is harder & stronger than
Rosin & is Sol in
Alcohol this is
ok for disc blanks
in place of Shellac

1389 E

Var

175 grams

15 grams Naphthalene

Land Sharp Crackly

NG

1390 E

Var

May be affected by bleaching of ~~[illegible]~~ test.

175 grams –
10 grams Phenol.

Fair surface, but much softer than Reg tried right after same turned darker Meaker –
Surface only 60% in hardness of Reg –
Blank shiny all over like 1381 but wavy hills. considerable areas –
In places globules & drawn together Explaining blank –
Looks is 2nd best of 1381 & promising

1391 =

Acts like Req

1391 E

Hoffman

Enough powder for 50 Blanks — Make only 6 — Varnish Req + permit 1 Keep balance of powder

28½ lbs Powder
21½ lbs Chalk
8 lbs of Resinate Consisting of 12 lbs Rosin 1½ lbs Magnesia Oxide — West ealid

1392E

Dunaddis took a good
working mould put 4 bag
tits around Edges & presented
21. first record was about
regular surfaces with Considerable
Crackets —
21st Records about same condition
say it was very worse
on other surfaces is very round
found only one of the radial
ingrowths with normal Tail
=>

1393 E

Varnish

175 grams

8 grams Chalk

Var 6 pment 1

Not as sharp as Reg

13942

Varnish –

175

8 grms Zinc Oxide

Var 6 pement 1

Like Reg – more cracked

Very bad looking surfaces

1395 E

Varnish —

175 -
10 grams Carb Lead

Var 6 permit 1

About same as Reg

1396E

Varnish

175

6 grams starch

Var 6 percent 1

Settles out just a little

No better than Ray

1397 E

Varnish —

175 grams

8 grams Strontium Oxalate

Settles out a little,

Much softer than Reg — This is PROMISING + blank dull

Very Clotty — Clots if got out might improve it.

(31)

1398 =

I pressed another blank
it had lots Cracks —
found these are due to
white soft opals — also
found lots of small
holes as if pulled out
or lack of varnish to fill —
Trouble is want of
fumes —

1398 E

Varnish

175

8 grams Strontium Fluoride

Vary to permit 1

Settles out very little.

Very soft VERY PROMISING

More than 1397 — 3 times over
no Cut Blank peculiar
note lots of pure white opals
as if on top of a bubble
probably should be fumes —

Whole thing strange

Lots larger numerous

1399 E

Varnish —

175 grains —
8 grains phosphate Copper

Var 6 permit 1

Settles out Var Bad,

A little better than old black
Reg not as good as Reg test
moulded on blanks. Cheap
tests made on —

1400 E

Varnish —

175 grams

8 grams Mag Carbonate

Run 6 percent 1

Mag Carb - settles out of Varnish

~~Blank~~ Shade better Clean and Blank Reg about same as new Blank Reg —

Blank side Pretty good —

Curious — Blank dull grey EVEN matte - no Cloth Varnish apparently all gone in —

1401 E

Yarmouth

175 grams

8 grams Otrantia phosphate

Year 6 — plant 1

family graft — both sides

PROMISING

1402 E

Varnish

175 grains -

8 grains

Ferrocyanide of Zinc

Varnish 6 percent 1

for on music side, very soft + weak surface on blank side —

Blank shows best lots of clots -

PROMISING

1403 E PHENOMENON

Make up powder only

28 ½ Lbs Powder
21 ½ " Chalk
use reg lampblack in blank

Varnish
6 Lbs Rosin
30 lbs Alcohol

Made 8 blanks — using sesame oil on moulds rag wet with it rubbed over & then wiped off —
all OK — Printed the 8
all OK — This shows Rosin OK & no sticking to moulds if sesame used —
good WW Rosin used

1404 E

Var
175
15. very finely
powdered. Reamate of lead
Through 190 mesh
Var 6 percent 1

Dont settle out at all

Run out 6 all right
specs — not good —
surface fair — too much
lead,

Am making a Ocean Leaf

Reinspected 1/29/16.

1 printed OK. 4 Blks OK. 1 Orb Blk.

1405 E Made 12/9/16

Var 175

6 grams finely powdered Resinate of lead through 190 mesh

Var 6 percent 1

Dont attempt out of Var at all

Smoother than Reg. ~~black~~ smooth side soft 3 times over dont Cut. Blank Very shiny continuous Varnish only scattered Cracks Very promising

PROMISING

(47)

1406 E

Varnish

175 grams

15 grams Tungstate of Calcium

Varnish 6 percent 1

1407 E

Varnish

175 grams

8 " Stearate Magnesia

Specs all thin, Varnish awful

Cuts NG

1408 E

Varnish

175 grams

8 " Zinc Oleate

Record full checks - Rough

NG

1409 E

Varnish.

175 grams

15 grams Stearate Calcium

Very Rough - dont fill Cuts — White specs all thru — powder too Coarse NG —

1410 E

Varnish

175 Grams

8 grams Stearate Barium

Record Very full of Checks

Handled 29

1411 E

Varnish –

175 grams –
8 grams Stearate Alumina

Records Cuts – full checks
Very bad handle

1412 E

Hoffman

Make up enough powder
for 10 blanks –

2 wood
1 Cotton
4 Chalk –

Make up the blanks & let me
see them –

CBJ

1413 = Have 77 OK + only
5 Discards - PO near center hole

Hoffman says - Ground wood fabric & flock together before mixing then mixed reg - ground 98% thru 180
Powder seems to tear when struck off by loader - pack good in small press - powder tears on strike off on turn table -
Leaves records good + clean
95.6 OK -

The flock fibres under microscope seem very long -

1413E

Not so good as 1417
surface not as good
Dropped 20 times -
12/11/16

Make 20 Blanks -

2 wood
1 flock
4 Chalk -
1 Lac
+ Experiment to get right thickness of blank - Let me see them -

This makes a beautiful blank very Even fine surface
The flock is the predominant fibre
no sign of a pull out. clean
Sto Tough + think second will be very strong

1414 E

Hoffman is duplicate
with 1000 records
the 1.2 Shellac
Reg +

1415E

Varnish –

175 grams –

8 grams Tungstate Calcium

fired to on big pie plate on my bench –

Record soft – good –

PROMISING –

Blank – no cavities like Reg-Gut its ~~the~~ full of ~~shrinks~~ cracks all about same size –

Should make a lot of Tungstates to get a finer precipitate,

1416 - Hoffman amp
Ground 98% then 180. Pucks light
in moulds, powder tears when
struck off by loader
Pucks form in small pieces
3/8 strike off -
Tears on strike off at turn
table leaves moulds cloudy
but clear -

Has nice surface -

Too thick

Calipers 322 High 313 Low

Weight 600 grns

Will try a smaller Mould

1416E

Not so good as 1417

Hoffman

surface not so
good shows mottle
Dropped 14 times

Make up enough powder
for 10 Blanks

1 Wood Wd
1 flock
5 Chalk
1 Lac

Make up a blank +
show to me

1417 look fine surface fine grain - some wood got in - wets about same as reg perhaps little faster - swells up Cuts tough - apparently plenty of fibers to give toughness

Looks very promising

More Lac would make it better think its too dry

Too Thick -

Calliper 308 high 280 low will try thinner moulds

Weight 551 grms

Printed 11 Every one of the faces of the blank stick to moulds terrible job - No strength to surface must have more Lac also probably more flock -

1417 E - Printed 1 - China Var - no matte very fine surface

This is the right direction to Experiments - surface weak tends to stick to moulds

Hoffman

Came off OK after 10 minutes Cooling - Made 12 drops strong enough

Make up enough powder for 10 Blanks -

1 flock
6 Chalk
1 Lac

make up one blank

Hoffman reports - ground 97%
Then 180
Loads heavy in moulds powder leaks when strike off by loader
Packs from in small press
tears on strike off at turn table
1/4 strike off - less moulds
Cloudy but clear

Resinate of lead ground up moist with alcohol - very fine —
Rubbing on finger as it dried is slightly showing alcohol dissolves some of Excess Resin

It appears to be soluble in hot alcohol but even then opens slow, but when cooled throws most of it off - usual —

This may have something to do with peculiar action on a Varnish —
However it may be it makes particles transparent to certain extent —

Reinspected Jan 29, 1917
Print OK 3 Blks OK

1418 E Made 1/12/13/16

Can of Resinate Lead
Varnish 175 grms Var
to 8 grms Resinate Lead

This is for Varnishing
1412 1413.

1418 Sent up a small bottle to Varnish 6 percent ovi — This was Filtered through one thickness linen — some left on used Vara filter small cap it closed up had to do it in 2 doses this works OK can use say 10 Resinate allowing 2 for loss getting 8.

The Big lot of 1418 will not be filtered —

1419

I varnished 3/4 of a Reg
blank with boiled linseed oil
let it stand for 5 days
The unvarnished part took
water in Twice as quick
as varnished part.
Some places 3 Times faster
where it happened more
linseed oil —

This May be Useful

Dec 12/16

Charles Edison gave me a sample of a hard lumpy white Clay? found in unlimited quantities owned by a friend of his—

Put in water it swells up to a transparent jelly. its fineness is unlimited not attacked by HCl—

Has specs in it possibly comfort and speed very fine— This Clay? only strange— its the finest for fence looks and acts like butter—

POSSIBLY USEFUL

773

1420 F

Print 1. from the lead-face blank
filled linen, with Otto B.
Nickel plated —

One side came free but the
other side (nickel) didn't
probably because nickel
peeled produced wrinkles
as you saw in mine —
Noticed Vacuum equalized
well in one place

1421 E

Take this 1418 blank +
Varnish it again with
1418 Varnish —
print on ~~E~~ P Otto
Nickel plated mould

1422 E

Record OK mechanically

This has a more quiet sound than 1423

5 ft Drop broke 3rd drop

Varnish (Req) looks better than on Req blank — etc

Even but of Course Clotty

Print stuck to mould but got it off — Cracked ~~but~~ in 2 or 3 places

(0)

but surface is good, some cracks

While surface is very good, have heard with this Varnish + ~~least~~ mould ~~about~~ just as good with Req blank

This blank fails as surface of blank not coherent enough to permit printing

Hoffman Report (ground) 97% fine thru 100 — Random increase bars on strike off.
Screens need mould clean — 6 made 100%.

1422E

Hoffman says never be able to screen it or use Newage screens as it would cut all the flock out,

Thinks wont need screen use it direct from Mill.

Hoffman

Make Enough powder for 30 blanks (about) 6 Chalk

1 flock 1.2 of Rosin

There should be 5 of alcohol to 1 Rosin — use scoame on mould

Make up 6 blanks —

Print one on a rejected working mould

Req ↓ as

possibly 1½ or 1.3/4 Rosin would cure it,

1423 E

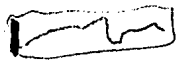
Record OK mechanically — of course its a descend ~~[illegible]~~ 4 full snaps well now have good mold used + print consider —

Not so quick quick as 1422 E

5 ft drop - broke 11th drop -

Varnish looks better than on Rej — of course its Cloty — 12 printed 100%

PO - 1 side 1
PO both 2

1 Varnish PO
1 
1 

Cuts soft, dont seem to be Enough Rosin

1423 E

flock seems to be balled up even in the powder - 97% fine — 6 made 100% leaves mounted clean, does same wand

Hoffman

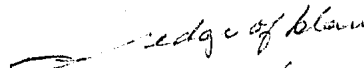
Make powder for about 30 blanks.

1½ flock 5½ Chalk
1.2 Rosin —

1 of Rosin to 5 of blackhole
No sesame —

Make 6 blanks - print one on a Descend mounted Rej Vor

1424 E



Pair of Moulds with ridge raised around edge to prevent injury from blanket —
Ridge about .020 high inside —
116 prints made 84-11 Dec. 16 - gave 77 %
O.K.

Note - tested a large number of chemicals to coat molds to prevent Rosin attaching -

following are OK

Paraffine Oil
Sesame "
Olive "
Albany grease
Monochlorophenol

Paraffine preferable as can get it pure -

1425 E

Make up dozen Rosin blank - 1380 E

Using Paraffine Oil on the molds -

Varnish 12 print them all on Reg Molds & send to Edison

12 Printed Printed % 100

Inspected =

" One fine crack radial to mission
PO Label on both sides 3
PO " one side 4
The only trouble with 12

1426 E 12/15/16

Dup of 1425

Except Varnish with
the Special Varnish
from Frodott.
1418

Proofing 100%
Inspection

Reinspected Jan 29/1917.
Print OK.

[91]

Inspected Jan 29, 1917
4 Printed all discards
2 Venus pull Outs on label.
1 Venus ok on label
1 Cracked Blank.

1427E 12/16/1916

Make up 12 of the 1380 Rosin blank, using Sesame —

Varnish 6 & print 3 on the new 12d moulds - the original & the last tests moulds —

8 Blanks made 6 ok 2 discards 1 of which Pull Out 1 mechanical sesame

Eileen - The surface is just as soft on Reg Varnish on pred oils Varnish — There is Extremely good soft surface —

probably be very little complaint
Except on very quiet records
I noticed that one time had
such quiet tracking all I could
do to hear coherence the opposite
tracking was very noticeable
There were 2 or 3 mechanical
defects – Var pulled ~~that~~ out
Edge probably due to ring
+ a Crack there

Worth keeper Rosin mix req. 4 fabric
3 wash + this Varnish
I think would be satisfactory
if working mould surface
is OK

PHENOMENON

1428 F

Dup of 1427

Except Varnish 6 with
Fred Otto's Var 1418 F
+ Prevent all the last
moulds on them

8 blanks made 2 Pull outs
6 OK – resume

Paraffine oil probably works
better

The surfaces on these
records are very good
+ about satisfactory
if equally good ones could be got
on clothing moulds there would

1429 The Okonite show slight
Pullouts —

1429E

Hoffman make
30 or 40 blanks —
3 Wood 4 Chalk
1.2 Rosin —
4 of alcohol to 1 of Rosin
use ~~[illegible]~~ paraffine oil
& Report when ready
& 4/0

Dont mould good clean
to mould — blanks Cracked
94% fine — 4 times then Well —
7/8 mould rough strike off & bottom
places 3/16 strike off
12 made 1 pull out 6 Cracked
5 OK 41.6%

1430 E

Hoffman Make a dozen blanks or more

1½ flock
5½ Chalk
2¼ Rosin —

Alcohol 4 times the amount of Rosin — Parafine Oil —

Send 6 up stairs to Varnished Reg. one painted on the card mould —
Keep the other 6

Notice — Too thicky when not in fuller mill
abandoned Expand

1431 E

Drop Test

1 3 times –
1 4 "
1 4 "
1 2 "

Too thick – wants
Reg Size + .7 Rosin –

One time Turned down mandrel
is very very soft & weak spot
& perfectly concentric
the other side is hard
always – its not the
blank –

1431 E

Blanks are too
Hoffman thick – wants
7/8 mould

Make few blanks –
like 1380 E except make
the fibre 3 & the chalk
4 –

Varnish & print one
on test mould –

Hoffman Report – ground 3 times
to get 97% thru 180 – Paraffine oil
used on platens; Loads good
strike off clean leaves moulds
slightly frosted but clean –
6 made all OK
Printed 6 – 1 blank cracked
2 PO on labels others OK –

CWJ

Drop test

1	20 – broke then –
2	3
3	3
4	8

1 was cracked up above in pouring

Think could make this OK by Experimenting

Kucher said Records stick hard to moulds

guess 4 wood 3 chalk .6 Rosin is what use must stick to —

1432 E

Hoffman

Make some blanks

3 wood 4 Chalk 8/10th of Rosin – 4 use a 7/8 mould, – 4 alcohol to 1 Rosin

Make 6 ~~[illegible]~~

Print all on Reg Moulds

Hoffman Report Moulds coated Vaseline – wiped of lightly with clean rag & hardened rag – Moulds nice pieces from 7/8 mould

Calliper 204 223 214 – 208 – 1/8 shrink off – no tear on shrink off

Lenox moulds clean – but frosted in opal

5 OK one Cracked –

1380E Rosin .6 - percent

had a second in oven at

125° Fahr 3 hours —

one side developed a

Rout — Otherwise ok

but I imagine poorer

Outfacing — Otherwise

Record OK no warp or

alteration of appearance

1433 E

Hoffman –

Make a few blanks –
All fabric no chalk
use 7 fabric 1 lace

Send up stairs 6,
Navarrah 6 – print 1
on test manual

Deaf today – test when
ears are OK.

Tried it again – stuck fast to Mould

1434 B

2 Blanks – with Rubber dope thinned by Benzol rubbed over dried –
to be varnished one the Dope side + not on the other – Print Varnished side on test mould + unvarnished side on a Discarded mould

The first attempt, Venser all pull off blank + mould stuck – This cant promising

More on it will be necessary to use almost undiluted dope in any Event its PROMISING if it doesn't scratch,

1435 E

One side of 2 blanks Varnished with 1/2 thinned down film dope Cooper dried - Varnish Dopeside + print on test moved print unvarnished side on a discarded moved

This works OK. Surface seems good Eye inspection all OK — except 020 pull out near label -
This Dope can probably be put on much thicker I put it on very roughly by hand, to get,

C110

1436 E

Kurcher — Reg

Take 6 blanks Varnish wether
Varnish having no Lamp black —
Dont bake just dry Couple hours
then Varnish again with.
1384 E Varnish made by Fred Ott,
Send for it Tuesday

Cant test Deaf now — Save —
will print 3 more & save on
Var blank.

Miller Aug. They have very
quiet surface. It dont
seem so to me while I am
deaf — There is in first
one printed 4 swaps 2 on a
side both Varnish defects
fine pull outs — There is
bad —

1437 E

2 blanks coated
thick Cooper film dope 1 side -
One of these is to be
Varnished Reg & printed
on one side — with test mound

The other is to be printed
direct without Varnishing
on a discard mound

The one printed direct on the
dope is no better probably
louder than the side
with nothing on -

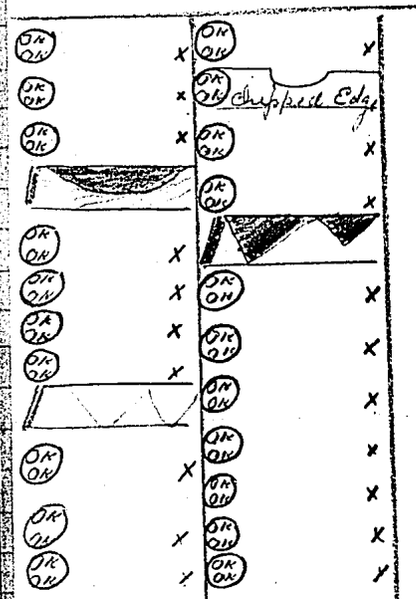
The other with Varnish over
Listen when not Deaf
Miller says Gene Sure good

1438E.

This is discard mould
with ring around Edge
010 & 3 tits 40/1000
looks good —
Make some good moulds
with this on & run reg
Running Every 12th &
note defects & % of
all —

1439-E

1/13/15



83% 91%

83% 83%

1439-E

Make 1 Wraps one all Dupont wood Hardt Blades regular way. Gas & finish regular way

2 Blades to be printed on Mfr. Edisons Test Master Hardt delivers 2 round to Miami Beach

[1197]

1440-E

OK OK	x
OK OK	Conv - 3
OK OK	Conv - 3
OK OK	x
OK OK	Conv - 3
OK OK	x
OK OK	Conv - 1 - 2 - 3
OK OK	Conv - 3
OK OK	Conv - 3
	poice lighting
OK OK	Conv - 3

83%

25%

1440-E

Make Round of Handles on highly polish [illegible] Gad [illegible] regular [illegible] Print 1 on [illegible] Polish [illegible] Hone, divide all to [illegible] Round. Bldg 4

Moulds good, leave Moulds clean

C125

1/25/16

OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x

100%

100%

1441-E Dup. of 1440-E

Only difference is Mouth have been washed with 1% Solution

Van & print repeat on

Print 1 round & send to

Bldg #4

1442 E

Varnished with NC magnetic.
made by Kaffman & filtered by
Edison in small Vacuum filter
filtered too slow & filtered out
too much stuff — should say
1/3 filtered out. Very shiny & good
& blank mat with clean edges —

Will print the 6 made,

1443-E

Varnish & bake

Regular way 6 blanks,

send to Millis to show

Mr Edison

1444-E Varnish with Lead Arsenate supposed to have been used on previous experiment 1351-E

Var & Bake 6 Blanks regular way print 1 on Spun test Mould send to Bldg #4 for Mr Edison.

1445-E

Resonate of lead free from Resin. Put through fine grinding paint mill with alcohol. then Alcohol filtered off on Two filters Resonate not allowed to dry. filtered O.K. through two thickness of linen Varnish & Bake 6 Blanks Regular way Print 1 on Special Test Mould. send to Bldg & for Mr. Edison

1446-E

Resonator of Lead free from resin that had been cleaned. Re-wet with alcohol then filled to get rid of alcohol - cake not allowed to dry. Then put in mortar with a little Carbon to work up the cake - filled OK.

Varnish & Bake & Bleach

Regular way, print 1 and Special Test Mould send to Bldg 4 for Mr Edison

1447-E

Made Resonate of lead washed on filter with water then partly washed with Alcohol on filter then give one wash in [illegible] to extract resin filtered & Alcohol then took 10 g- ground in mortar with a little Varnish to work out lumps then put in Rig under run 1 hr. filter OK.

Varnish & Bake 6 Hours regular way print 1 on Special Test Mold for Mr Edison send to Bldg 4

1448-E Duplicate of 1447-E

Except two treatments with Alcohol to extract resins. (No. 1447 & 1448 to much change for water also to much Alcohol required.

Varnish & Bake 6 Blanks regular way print 1 on Special list Mailed for Mr. Edison send to Bldg 4

1449-E Special Printing Schedule.

4/10/17

98.7% OK got 1308
92.9% on blanks.

Put on shelf Monday 2/19/17
for time test 10 days

But from this one would infer Chino Varnish was a Bad failure — It may be
But
This kind of Exptq is d—d poor
one lot of moulds were good
the other lot poor rate
to ascertain anything both
should have been prepared
with same moulds about same time

1450-E.

Mr. Hoffman:

Please make one drier full of powder in which 1/10 of the shellac is replaced by Resin.

Blanks are to go thru special and record kept of discards

12 prints to go to Miller to be marked on labels permanently and put away to see if they deteriorate.

2 prints for hot and cold test.

Put 12 on top of Cupboard also good
Smith is [illegible]

Chino Var

The surfaces a very bad

Run oils also —

E

The other lot with Regular Varnish was good surface —

C40

1.) 210 - 201 - .009
2.) 202 - 197 - .005
3.) 209 - 199 - .010
4.) 215 - 203 - .012
5.) 197 - 190 - .007
6.) 194 - 197 - .007
7.) 202 - 188 - .014
8.) 211 - 207 - .004
9.) 209 - 206 - .003
10.) 224 - 214 - .010
11.) 202 - 198 - .004
12.) 221 - 211 - .010
13.) 201 - 184 - .017
14.) 198 - 182 - .006
15.) 214 - 197 - .017
16.) 205 - 194 - .011
17.) 199 - 169 - .030
18.) 217 - 204 - .013
19.) 206 - 198 - .008
20.) 198 - 191 - .007
21.) 207 - 196 - .011
22.) 218 - 210 - .008
23.) 195 - 185 - .010
24.) 210 - 191 - .019
25.) 209 - 204 - .005
26.) 220 - 209 - .011
27.) 219 - 210 - .009
28.) 195 - 188 - .007
29.) 210 - 187 - .023
30.) 210 - 204 - .006
31.) 206 - 200 - .006

1451-E

Make some blocks everything reg. except, use Spk sample of Dupont wood instead of Norway-wood.

This Experiment is for Calipers Measurements on Records.

1452-E Duplicate of 1448-E except filtered through 1 thickness of linen

Now take 6 Regular Hay Print 1 on Special Mount for Mr Edison send to Bldg 4

1453-E

Made with resin extracted from Resonate of lead which has given good results - this resin contains some lead

6 grams resin
175 " " Varnish

Varnish & bake 6 blanks regular way.

print 1 on Special Test Mould for Mr Edison
Send to Bldg 4

1454-E

Made with using extracts
from lately made Resinate of lead
6 grams Resin
175 " Turpentine

Dissolve & Bake 5 Hours Regulos
way
Profit 1 on Liquid Test Mortar
for Mr Edison
Lead to Bldg 4

1455-E

Resonate of lead made with
40 g Na OH at 20 Be
40 g Resin + lead Nitrate sol.
Hard filtering had to change linen twice

Van & Babe 6 blanks regular way.

Print 1 on Spiral Test Month for Mr. Edisen
Send to Bldg 4

1456-E

Resonate of Lead

40 g. Na OH at 20 Be

80 g Resin & Nitrate of Lead Sol.

Hard filtering Resonate of Lead not all dissolved

Van & Bake 6 Bl. required scum

Print 1 on Special Test Mould for Mr Edison

Send to Bldg 4

1457-E

Resonate of Lead made into
40 g Na OH at 20 Be
30 g. Resin & Nitrate of Lead Sol
Hard to filter had to change liners

Van & Bake 6 Blks repulped Tray

Print 1 on Special Test Mondel file
- Mr Edison
Send to Bldg 4

1458-E

Resonate of lead made with
40 g Na. OH at 20 Be
25 g Nitro + lead Nitrate Solution
Hand filtering

Vary Bake 6 Bibs regulated away

Print 1 and Send Test Mixed for
Mr Edison
Send to Bldg 4

1459-E

Resonate of Lead made with
40 g Na. OH at 20 Be
200 g Resin & Lead Nitrate Solution
Hard filtering

New Batch 6 Blds regular way

Proof 1 and Special Test Made
for Mr. Edison
Send to Bldg 4

1460-E Mar 2-17

One drier full of powder in which 5% of the Shellac is replaced by Resin
Blanks to go thru special and record to be kept of discards

12 prints to go to Miller to be marked on labels permanently and put away to see if they deteriorate.
5 prints for hot and cold test,
5/2/17
92 + % Retest of 9.79 Records.

1461-F Nally's #14

5 grams Resinate of Lead 175 grams of Varnish with and Coarse Linen [illegible]

5 grams Resinate Lead
to 175 grams Varnish
filtered thru 1 thickness
fine linen & Coarse pulp
on fine linen Can filter
faster —

Will start using
this Varnish
March 14/1917

1462 F Dally's Resonate of Lead #33

5 grams Resonate of Lead 175 grams of

Vern. Very brittle - Hard to pulve

1463·F Duf of 1462 except 10 Ounces
of Resonate of Lead to 125 grains of Tessuit
& Hard to fitts

1464-E Dwgs. of Lamp No. 1 Bracket
of Lead. H. B. and Light Stand.

C171]

1465-F

9 grams Resorcit of Lead
175 grams of Varnish without
Camp Black Iron Bolting hard filtering

1466-E Dup of 1461-E

Exact amount in bag, bate 53 lbs.

Resinate of lead.

1468-E

1 Dryer of Pegulao Pondo
with 10% of fine grained blanks.

No difference in surface -
from pairs 1468-E and replacement
prints from same metallic kept

9/9/13

92.5% OK out of 545 Rounds

C179J

1469-E

one diver Regular powder
with 20% of fine ground blanks.

8 parts new
2 parts regrounds.

83.9% okay of 490 Recvd 3/13/17

March 13-17

1470-E about same as 1380-E Book 19

One drier full

40 lbs wood fibre
30 lbs chalk
10 lbs 6 oz Water White Rosins
3½ lbs alcohol -
½ qt. amt lamp black

use parafine oil on mould and wipe dry.

Keep acc. of percent of alt tern.
Make lacker test
Send 1½ pints to Miller in Building (4)

C1433

1470-E about same as 1380-E Book 19

One drier full

40 lbs wood fibre
30 lbs chalk
10 lbs 6 oz water white resin.
36 lbs alcohol -
reg. amt lamp black

Use paraffine oil on moulds and wipe dry.

Keep acc of percent oil, all thru.
Make sugar test.
Send 12 prints to Miller in Building (4)

1470-E

Moulds washed with tanning solution. Blanks raised 1/16 in above mould ring. 1/4 in strike off bar moulds above Moulds 1261 Schedule.

1624 Moulds.

27 Pull Out

1397 OK 98.3%.

97.1% OK out 1400 Records

87.7% OK on blanks

1470-E

57 lbs wood fibre -
43 lbs chalk -
2 lbs lamp black -
{12 lbs rosin.
{50 lbs alcohol -

See 1380 E Original 54 lbs alcohol

One drier full -

Use Paraffine oil on moulds and wipe dry

Keep acc. of per cent OK. all them make wear test.

Send 12 prints to Miller in Building (4)

Mould & Print Regular - but make 24 blanks on [redacted] 1261 schedule and keep separate.

Drop test

1 — 10 times
2 — 5 " "
3 — 2 " "
4 — 5 " "
5 — 18 " "
6 — 5 " "
45 times

1471-F Dup of 1461-F Graph
made in a large Section Paper's
Resume of Lead # 14

[189]

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 21
Notebook, N-17-04-11

This notebook was used by Edison, William W. Dinwiddie, Archie D. Hoffman, and possibly other experimenters during April-June 1917 for notes on efforts to produce a perfect disc record blank. The entries pertain primarily to a sequence of experiments numbered from 1472E through 1567E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients, along with "drop" tests intended to determine the durability of disc records by dropping them numerous times on the floor. Between experiments 1495 and 1496 is a summary by Dinwiddie of previous "Rosin Blank experiments," numbered from 1470 through 1486. Many of the entries are in the form of instructions by Edison or Dinwiddie describing the experimental records wanted, accompanied by evaluations of the test records produced. Flaws and successful results are both noted, along with comments on the durability and thickness of the records. One entry refers to the possible use of nickel plating (later adopted) on the face of the copper record molds. The last entry announces the "discovery of an important principle," which is pursued in Book No. 22: the powder in the rubber-packing press must be considered as a mixture of powder and air, and the air must somehow be eliminated. Inserted into the book is one note by Edison, as well as some calculations by an unidentified experimenter. The front cover is labeled "Disc Records" and "21"; the back cover is labeled "21." The pages are unnumbered. Approximately 150 pages have been used.

Drop test on 1472-E

1 —	1
2 —	3
3 —	2
4 —	20
5 —	17
6 —	2
	45

Look after ~~X~~ 1495 for resume of Rosin Blank experiments.

This lot made out of the cut off from all previous 1472 Experiments. Little better than sweepings. all Rosins mixt. made morning after fire.

1472-E

57 lbs wood -
43 lbs chalk -
2 lbs lamp black -
15 lbs Rosin.
50 lbs denat. alcohol.

dry -

grind with equal quantity of reground blanks -

Took fire on [illegible] to atmosphere [illegible] Oil [illegible] smoke [illegible] distance -

95.9% OK on 7986 Records.
96.9% OK on 620 Records
95.9% OK on 2360 "
95.8% OK on 4013 Records
91.1% 14,64 Blanks.
68.3% OK out of 1562 Records
92.3% OK on Blanks.

1473-E

OK	x	98.1% OK at 979 Records
OK	x	76.5% OK as blanks.
OK	x	
OK	x	
OK	x	
OK	x	
OK	x	
OK	x	
OK	x	
OK	x	
OK	x	
OK	x	

100%

100%

1473-E

57 lbs. [illegible]
43 lbs. [illegible]
3 lbs. [illegible]
12 lbs. [illegible]
50 lbs. [illegible]

One [illegible]

Drop test
1 — 4 times
2 — 10 " "
3 — 9 " "
4 — 2 " "
5 — 1 " "
6 — 8 " "
34 times

Handles with tanning solution
Blades raised 1/16 in above Mould
ring 1/4 in strike off bare Handles
clean
Monitored 1261-E Schedule.
1308 Made
8 Pull Outs
1300 OK 99.4%. Blanks Rejd Only.

1474-E [illegible]

[illegible]

[illegible] Dec 1 52

[illegible]

Blanks look fine

1475 E

Chuno Var

1 Cotton flock.
6 Chalk
1 Rosin -

4½ alcohol to 1 Rosin

12½ lbs cotton Floc -
75 lbs chalk -
2 lbs lamp black -
13½ lbs Rosin -
56¼ lbs alcohol -

1476 B Chimo Var

1 Cotton flock
6 Chalk
1 1/4 Rosin —

4 1/2 alcohol to 1 Rosin

12 1/2 lbs Cotton flock
75 lbs chalk -
2 lbs lamp black -
15 lbs 100% Rosin
67 1/2 lbs Alcohol.

Very Heavy Blanket

II good
III V good.
II Very fine one of quickest ever heard
I dead number

If moulds were all good this blanket would be best yet seems to have bubbles like Cocoanuts more than Rag

1477 E

1 Cotton flock
6 Chalk
1 1/2 Rosin —

4 1/2 alcohol to 1 Rosin

12 1/2 lbs Cotton flock
75 lbs Chalk
2 lbs lamp black
18 3/4 lbs Rosin.
84 lbs 6 oz Alcohol.

Blanks shaved crafts 2 lbs Qx.7
& Baked. none printed all cracked.

CU

1478-E

Take 5 blanks #1417-E
have them Varnish with Shellac
Varnish

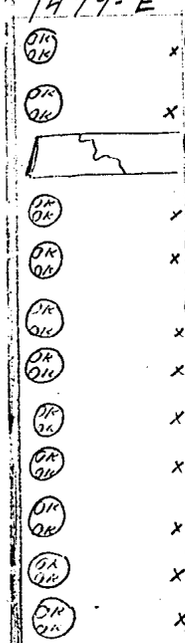
Print three of them on one
Regular Recording Machine &
1 on the Other Test Mould.

Save 1 Blank to refinish
with Shore Rite —

Glass shows marble, also showing no
grooves to restrain. Blank flows
towards Edge rather. Checks
surface not good not near as
good as a record on same
blank — Blank not
promising —

4/11/17.

1479-E



Drop list on 1479-E

1 —	8	times
2 —	20	" "
3 —	16	" "
4 —	15	" "
5 —	9	" "
6 —	10	" "
	78	" "

1479-E 69 A. 5/3/17

69.6 % OK out of 3830 records

82.3 % OK on Blanks

1479 EWG 5/4/17

61.2 % OK out of 1126 records.

84.4 % OK on Blanks.

1479-E 80 A. 45.5 OK out of 547 Records.

80.2 % OK on Blanks

1479-E 82. A 23 % OK out of 513 Records

72 % OK on Blanks

1479-E 83 A 12% OK out of 611 Records

83.6 % OK on Blanks

1479-E 84 A 11.8% OK out of 534 records

82.2 % OK on Blanks.

91 % 100 %

91 % 100 %

1479-E-B. 46. % Records OK. 4/24/17.
Blanks. 73.8 % OK.

1479-E-E 56.2 % Records OK 4/24/17
Blanks. 87.3 % OK.

1479-E

Dust of 1472-E except 75% Torpo powder and 25% ground Records

57 lbs wood
43 lbs chalk
2 lbs lamp black
15 lbs Rosin
50 lbs denatured alcohol

Fry and grind three parts of this with one part of reground Blanks

96.3 % OK out. 164 Records.

96.% OK out of 40 Records

92.% OK on Blanks

Only 79 % OK. on Blanks.

8/0 Records make with E Rosin only 76.7 % OK.

97.6 % OK out 737 Records

92.6 % OK on Blanks.

1479-E W.S. 68.1% out of 301 Records.

1479-81 A 20.1 % OK out 1012 records. 86.4 % OK on Blanks.

1479-79 A. 17.1 % OK out of 357 records 72.2 % on Blanks.

1479-78 A. 34.7 % OK out of 568 records. 84.7 % OK on Blanks.

(15)

4/11/17

1480-E

OK Oil	x	OK Oil	x
OK Oil	x	OK Oil	x
OK Oil	x	OK Oil	x

1481-E

4/16/1917

Drop test on 1481-E

1. — 2 times
3 — 3 " "
3 — 5 " "
4 — 4 " "
5 — 3 " "
6 — 3 " "
20 " "

OK ×
OK ×
OK ×
OK ×
OK ×
OK ×
OK ×
OK ×
OK ×
OK ×
OK ×

91%

91%

1481-E - 1261-E Schedule.

60 lbs wood
40 lbs chalk
2 lbs lampblack
13 lbs rosin
50 lbs alcohol

After drying mix in grinder with 25% of acid reground blanks.

1 part old blanks
3 parts above.

make one drier full

95.7% O.K. Over 2

1,275 Inspected
17. Broken Rounds.

92.1% on Blanks.

4/18/17

-1482-E

OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×
OK	×

100%

91%

Dropped before 1482-E

1. 5 times
2. 3 " "
3. 4 " "
4. 4 " "
5. 8 " "
6. 1 " "

25 times

1482-E

57 lbs Wood
43 " chalk
2 " Lamp Black
13 " Resin
50 " Alcohol

After Drying - compress grinds with 10% of old reground blanks

Moulds washed with turpentine solution blades raised 1/16 in. above Mold Ring scraped 1/4 in strike off. leave Mold 2 above Mold of 1261-E Schedule.
1521 Made

100% OK

97.7% OK out of 1123 Records

74.9% OK on Blanks.

C2W

1483-E

OK	x	Drop Left over 1483-E
OK	x	1 — 5 times
OK	x	2 — 6 " "
OK	x	3 — 4 " "
OK	x	4 — 6 " "
OK	x	5 — 7 " "
OK	x	6 — 4 " "
		32 " "
OK	x	
OK	x	
OK	x	
OK	x	
		Order Blank
OK	x	

100 %
91 %

1483-E

57 lbs. Wood.
43 lbs. chalk.
2 lbs. lamp black.
14 lbs. Rosin
50 lbs. Alcohol.

After drying ship in grinder with 10 % of old reground blanks

Mixed grated with tanning solution Made raised 1/6 in above Mixed Cones ramp 1/4 in trade off boxes Mixed 1261-E Labeled.

1458 Made
8 Pull Out
1450 OK 99 - % OK.

96.8 % OK out of 1142 Records.

81 % On Blends.

1484-E 4/19/17

OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	
100%	100%
100%	100%

Drop test on 1484-E
1. — 9 times
2. — 20 " "
3. — 6 " "
4 — 20 " "
5. — 20 " "
6. — 2 " "
77 " "

5/2/17
Drop test on 1485-E
24 times

1484-E Saturday 5/12/17

		Drop test
OK OK x	OK OK x	
OK OK x	OK OK x	1 — 3
OK OK x	OK OK x	2 — 4
OK OK x	OK OK x	3 — 1
OK OK x	OK OK x	4 — 6
OK OK x	OK OK x	5 — 6
OK OK x	OK OK x	6 — 4
OK OK x	OK OK x	24 times
OK OK x	OK OK x	
OK OK x	OK OK x	
OK OK x	OK OK x	
OK OK x	OK OK x	
100%	100%	
100%	100%	

1484-E
57 lbs wood fibre
43 lbs chalk
2 lbs lamp black
12 lbs rosin (WG)
54 lbs. alcohol.

make one drier full use tanning solution on moulds, send samples to Miller for drop test, this is a duplicate of 1380 and is the same as 1470 except that it contains a little more alcohol.

89.6% OK out. 1330 Records.

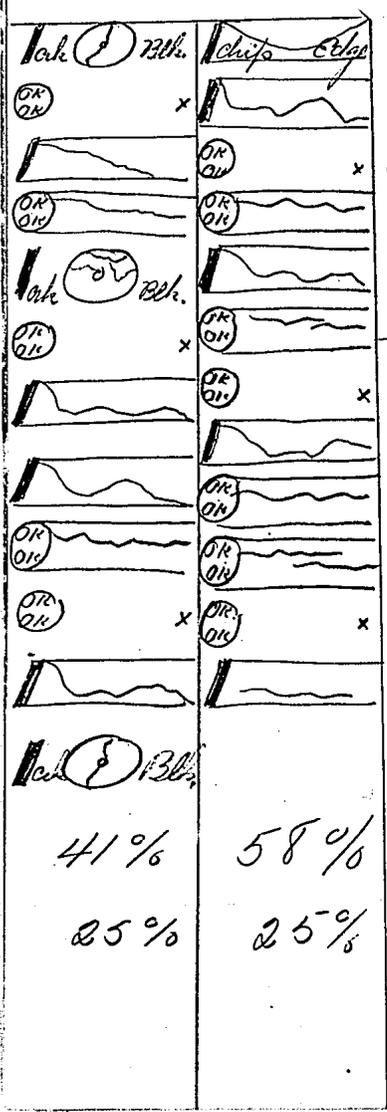
91.1 % OK on Blanks. with tanning solution on blank moulds.

duplicate on E. Rosin. Drop test 31 Moulding (Hoffman 99.7) Printing 42.7

Duplicate on I. Rosin. " (99.8)
42.7% Ok out of 1895 Records
86.8% Ok on Blanks.
44.2% OK out of 1233
89.2% Ok on Blanks.

1485-E

4/19/17



41% 58%

25% 25%

Drop test on 1485-E

1.	—	1	times
2.	—	2	" "
3.	—	4	" "
4.	—	1	" "
5.	—	1	" "
6.	—	7	" "
		16	" "

1485-E

57 lbs wood.
43 lbs chalk.
2 lbs lamp black.
15 lbs Resin (WG)
60 lbs denat. alcohol.

After drying mix ~~[illegible]~~ in grinder with reground blanks as follows:

3 parts above
1 part reground blanks

Make one drier full.
send two rounds to miller for inspection and drop test.

82.2% OK on 1305 Records.

93.2% on Blanks.

1486-E 4/25/12

OK	x	Drop test 1486-E
OK	x	1 — 5 times
		2 — 1 " "
OK	x	3 — 3 " "
OK	x	4 — 2 " "
		5 — 1 " "
OK	x	6 — 3 " "
OK	x	15 " "
OK	x	78.1% OK Records
OK	x	73.5% Blades OK.
OK	x	
OK	x	
OK	x	
OK	x	
100%		
100%		

1486-E

57 lbs wash.
43 " chaff.
2 " lauric Acid
15 " Rosin (WG)
50 " Denatured Alcohol.

Mix 25% ground blades in mixes with wood + chaff.

1487-E 5/1/17

OK OK Sev Spot 1	Dried test on 1487-E
OK OK Sev 1	1 — 15 times
OK OK Sev 1	3 — 20 " "
OK OK Sev 1	3 — 18 " "
OK OK Sev 1	4 — 8 " "
OK OK Sev 1	5 — 1 " "
OK OK Sev 1	6 — 10 " "
	73
OK OK Sev 3	
OK OK Sev 1	Notice we are supplying [illegible]
Bad Sev Spot	[illegible] cuts the Sevs
Bad Sev Spot	8.2% OK out of 865 Records
Bad Sev Spot	88 5 OK on blank
OK OK Sev 1	
Bad Sev Spot	
66%	

1487-E

57 lbs wood.
43 lbs chalk.
2 lbs campblack.
18 lbs Rosin.
80 lbs alcohol.
36 lbs old reground blank.
all put in mixer —
Make one drier full.

1488-E 5/1/17

Date Lot no [illegible]

1	2	turns
2	3	" "
3	5	" "
4	4	" "
	9	" "
	20	" "
	24	" "

OK OK — x

OK OK — x

OK OK — x

OK OK — x

OK OK — x

OK OK — x

OK OK Broken Edge

66%

58%

1488-E

A
- 57 lbs wood
- 43 lbs chalk
- 2 lbs lampblack
- 12 lbs resin (E)
- 54 lbs alcohol

} make 3 drums full

above is same as 1484-E

B
- 100 lbs old ground blanks
- 6 lbs rosin (E)
- 30 lbs alcohol

} make 1 drum

Mix in grinder 1 part B to 3 parts A

1489-E

Dup of 1461-E Except use I resin instead of W.W. to make Arsenate of lead.

Make a Dear Test

4/30/17

#1		#2	
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	
OK OK	x	OK OK	x
OK OK	x	OK OK Low Spots	
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x		
100%		100%	
100%		83%	

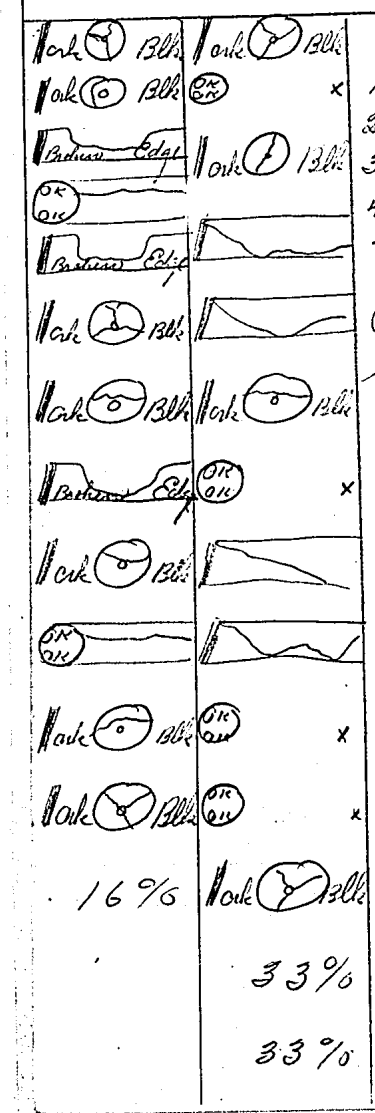
Printed regular work Apr. 24.

1490-E

34 Records of 1479-E
Rosin Blanchi
Inspected & put 12 on
Cupboard in Building #4
& 12 up in Music Room
for time test April 30, 1917
time 5 25 P.M.

C37J

1491-E 5/3/17



1. — 2
2 — 9.
3. — 4
4. — 6
21 times

Only had 4 good record for drop test

1491-E

Same as 1487-E but with less Rosin

57 lbs wood
43 lbs chalk
.2 lbs lampblack
17 lbs Rosin
76 lbs. alcohol
36 lbs old reground blanks.

all put in mixer. and mixed then gum added.

Make one drier full.

26.2% OK out of 653 Records
31.9% OK. out of 335 Records. 5/3/17
58.1% on blanks.

1492-E

5/3/17.

Ok (8) Blk.	OK OK	×
OK OK ×		
OK OK ×	OK OK	×
OK OK ×		
Ok (8) Blk.	Ok (8) Blk	
OK OK ×	OK OK	×
OK OK ×	OK OK	×
OK OK ×		
Ok (8) Blk		
OK OK ×	OK OK	×
Ok (8) Blk	OK OK	×
OK OK ×	OK OK	×
66%	OK OK	×
	Ok (9) Blk.	
66%		
	66%	
	66%	

Drop test 1492-E

1 — 3
2 — 2
3 — 2
4 — 4
5 — 7
6 — 4
22 times

1492-E

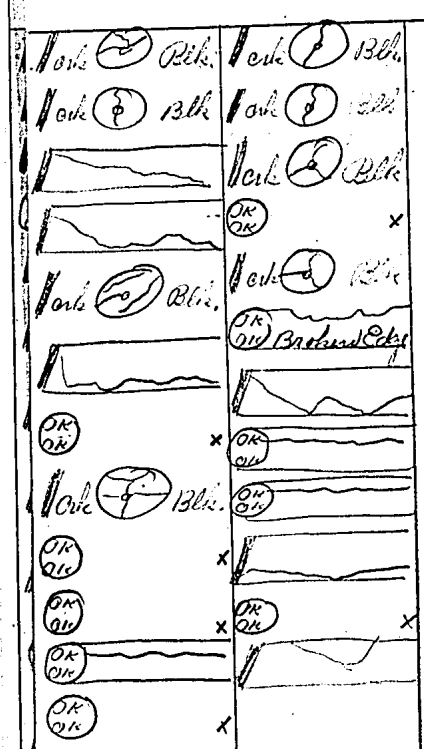
57 lbs wood.
43 lbs chalk.
2 lbs lampblack.
13 lbs Rosin.
2 lbs Shellac.
50 lbs denat. Alcohol.

dry and grind 3 parts of this with one part of unground blanks,

50 ½ % OK out of 1405 Recvd. 5/4/17
90% OK on blanks.

C417

1493-E 5/3/17.



41 %	41 %
33 %	16 %

Drop test on 1493-E

1	— 6	times
2	— 5	"
3	— 5	"
4	— 5	"
5	— 13	"
6	— 6	"
	40	

1493-E
Same as 1479-E except that soft blanks are reground instead of old records. — we have been speaking of reground records as reground blanks. —

38^{2} % Ok out of 263 Records. 5/4/17
82.$\frac{2}{3}$ Ok on blanks.

1494-E 5/3/17.

OK OK x	Work (8) Blk
Work (L) Record	OK OK x
OK OK x	OK OK x
OK OK x	
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	
OK OK x	OK OK x
OK OK x	Work (9) Blk
91%	66%
91%	66%

Drop test on 1494-E.

1 — 4
2 — 2
3 — 7
4 — 20
5 — 9
6 — 6
48 times

1494-E
57 lbs wood fiber.
43 lbs chalk.
2 lbs lamp black. duplicate of 1480-E
13 lbs Rosin. 3 rosin
50 lbs alcohol.

Dry and grind three parts of this with one part of regrounds records.

52.4% O.K. out of 1358 Records 5/3/17.
76.1% on blanks

C45]

1495-E 5/5/17

OK OK	x		
OK OK	x	OK OK	x
OK OK		OK OK	x
OK OK	x	OK OK	x
OK OK	x	Ink Blk	
OK OK	x	OK OK	x
OK OK		OK OK	x
OK OK	x		
Ink Blk		OK OK	x
OK OK	x	OK OK	x
		OK OK	x
		OK OK	x
Ink Blk			
75%		75%	
58%		75%	

Drop test

1 — 2
2 — 4
3 — 3
4 — 3
5 — 3
6 — 1
16 times

1495-E 57 lbs wood
43 lbs chalk
2 lbs lamp black
14 lbs Rosin.
50 lbs denatured alcohol.

Dry and grind three parts of this with one part of reground ~~blacks~~, records.

1464 Blanks inspected 58½% OK
778 Records inspected 58% OK.

24th -

1472 was not continued on account of blank being too weak. Drop test below 50

1479 was substituted - having less of old reground powder -

Note that with (J) Rosin → % all thru is greatest - may be a coincidence of circumstances.

Resumé of Rosin Blank Experiments.

See 1380-E in Book 19,

1470-E

Rosin Grade	Blanks made	% O.K. Blank dept.	% O.K. inspection			
				Parafin Oil used powder blank moulds.		
3-13-17 (WW)	858		87.2	2 rounds tested by Mills		91⅔% OK
				Parafin Varnish	197 records	84.8% OK
3-20-17 (WW)	701	71.3	89.6	1471 Varnish	197 "	83⅓% OK
						89.3% OK.
3-21-17 (WW)	755	79.7	68.6	record completely balled up.		
	367	74.9	51.3			

1470 E "Tanning Solution" (see 1380-E) - used on powder blank moulds — also on record moulds.

4-16-17 (WG) 1624 blanks made 98.3 O.K. before beveling.

87.7 O.K. on inspection.

Records 97.1% O.K. Drop test 45.

1472-E "Lubria" used on powder blank moulds.

	Blanks made	Blank dept					
3-19-17 (WW)	383	98.1% OK	375	½ 1471 Varnish	95.4	" "	90.1% ok on printing
			Blank inspection	217 Records	Var.		94% OK.
3-21-17 (WW)	523	97.5	96.7	217 "	1471 Var.		99.1% O.K.
3-24-17 (WG)	1812	92.2	90.3	1508 "	"	"	95.5 "
3-28-17 (K)	683	95.4	92.8	603 "	"	"	92.9 "
3-28-17 (K)	1311	98.8	84.6	1095 "	"	"	96.3 "
3-28-17 (K)	360	98.8					
4-2-17 (J)	1113	99.1	96.2	1090	1471 Var.		94.4 "
4-2-17 (M)	3766	96.1	79.4	734	"		92.2 % O.K.
			79.8	190	"		91.6 "
			86.3	980	"		94.9 "
			96.0	480	"		97.9 "

1473 — Tanning solution stopt sticking to powder blanks moulds but something queered later inspection.

1472 - is half old shellac blanks ground up and gives comparatively little trouble by sticking. but the all-rosin blanks require the tanning solution (See note on 1380-E Book 19)

Resume of Rosin Blank Expts (Cont.)

1472-E	Rosin	Blanks made	Blank dept	Inspection	Records		
4-4-17	(N)	2364	97% OK.	89.8%	798	90.6% OK	
				90.2 "	826	95.8% OK.	
				some missing —			
4-4-17	$(\frac{I}{2}+\frac{N}{2})$	2083	94.7% OK	90.2	569	92.8	"
				87.1	284	94.0	"
				94.2	966	94.0	"
4-9-17	(I)	Record lost ~~90.1%~~		90.1	2083	96.5	"
4-10-17	(I?)	not quite sure about rosin.		82.8	2360	95.9	"
4-10-17	(I?)	" " " " "		95.8	1837	95.8	"
4-11-17	(I?)	" " " " "		91.5	(14,641) total printed		
		Some evidently got in with regular work — — —			7,986	95.9	
					620	96.9	
					4,013	95.8	

1472 abandoned acc of low drop test. for 1479.

1473-E

~~3-26-17 (W.G.)~~ Lubrica (Hydraulic press solution) used on moulds for blanks.

		Blanks made	Blank dept.	inspection	prints		drop test
3-26-17	(W.G.)	874	77.3% OK	97%	655	97.4% OK	34
		Tanning Solution used on moulds for blanks.					
4-16-17	(W.G.)	1308	99.4 "	76.5%	979	98.1 "	34

Resumé of Rosin Blank Expts (Cont.)

1479-E "Tanning solution" used on all.

	Blanks made	Blank Expt	inspection	Prints			drop test
4-9-17 (WG)	1539	96.1%	92.4% ~~76.1%~~ 98%	237 648	97.6 %	OK. "	[redacted] [redacted]
4-19-17 (I)			79%	164	96.3	"	

Following cooled in drier by water in plates to prevent spontaneous combustion when trays are taken out.

							drop test.
4-24-17 (E)	3637	99.1	87.3	2243 prints	56.2 %	OK	23
4-24-17 (B)	1613	99.8	73.8	983	46.0 %	OK	16
4-25-17 (E)	5867		82.3	810	76.7	"	
5-3-17 [redacted] (?)				2,830	69.6	"	

1480-E - 4-11-17 (W.G.?) Rosin moulds treated with paraffine oil.

	made		inspection				drop test.
	1946	99.4%	85.6%	1658 Records	97.9%	OK	51

1481-E 4-13-17 (WG?) Rosin (Oil or lubria on moulds)

made					
1482	98.5	92.1	1275	95.7	20

1482-E 4-18-17 (W.G.) Rosin. (Tanning solution on moulds)

made	Blank Expt.	Inspection			
1521	100%	74.9%	1123	97.7	25

1483-E 4-17-17 (W.G.) Rosin. (Tanning solution.)

made					
1458	99.4	81.0	1246	89.6%	77

good

Tanning solution keeps moulds perfect

difference was attributed to Rosin
Fire occurring in Powder Plants Dept
on Apr 25 upset things so that this
change in cooling drier was forgotten.

May 2-17 { two rounds from powder 1479-E(I) not cooled in drier give 91% O.K. by Mills's inspection. Marked 69 A Hoffman's notation.

Four rounds from same powder cooled in drier give 8%, 41% 33% and 83% resp. Marked 70 A.

Resumé of Rosin Blanks (Continued)

1484-E (W.Cr.) Rosin Tanning Solution used.

	made	Blank dept.	Insp.	prints		drop test
4-18-17 —	1465	99.6	91.1	1246	89.6% OK	77

Drier cooled before taking out powder.

1484-E (E) Rosin. Tanning Solution used.

	made					
4-27-17 —	2302	99.7	86.8	1895	42.7%	31

1484-E (I) drier cooled —

1441	99.8	

1485-E (W.Cr.) Tanning solution - not cooled in drier.

made		insp.	prints		drop test
1415	98.9	93.2	1250	82.2%	16

1486-E (W.Cr.) Tanning Solution (not certain not cooled in drier?)

made					
1966	99%	73.6	1349	78.1	15

1496-E

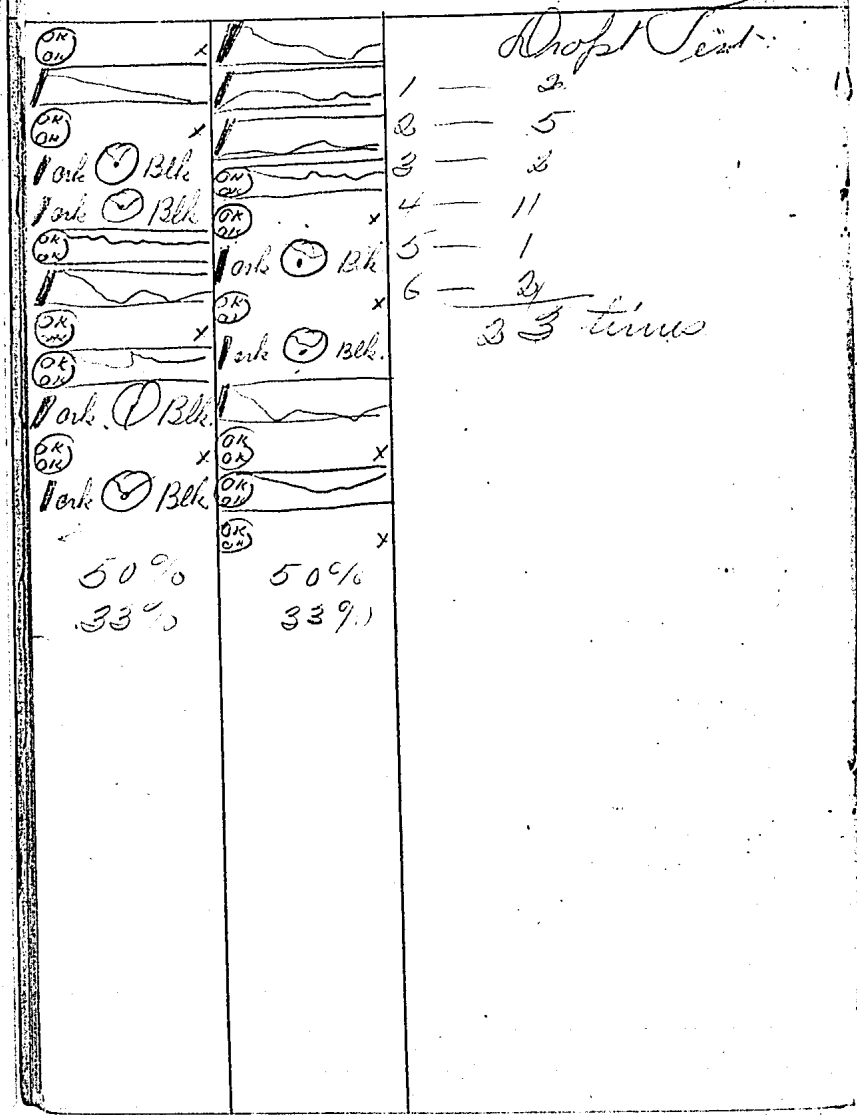
5/8/17

OK OK	OK OK	Drop test
OK OK	OK OK	1. — 6 times
OK OK	OK OK	2. — 7 " "
OK OK	OK OK	3. — 1 " "
OK OK	OK OK	4. — 20 " "
OK OK	OK OK	5. — 9 " "
OK OK	OK OK	6. — 13 " "
		56 times
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
100%	100%	
100%	100%	

1496-E marked 75A
Make 100 lbs only,
57 wood,
43 Chalk.
2 lampblack.
12 Rosin.
2 Ounces Castor Oil
54 lbs alcohol.
Send all to Miller in Building
(4) Save out 12 blanks.
to be varnished and finished regular.
Miller will put away 12 records and
the 12 blanks.
93 2/3 OK out of 45 Records.

(61)

1497-E



1497-E Marked 78-A.
Make one drier full—
Run wood thru Schultz-O'Neil grinder to break up lumps before mixing—
Same in every way as 1479-E
Car load of wood which we started to use April 30 was cared in lumps more than usual and gave trouble in the "Day" mixer.

1498-E

5/9/17.

OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x		
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
100%		91%	
100%		91%	

Only 23 Blanks in this Lot

Drop test

1. — 1
2. — 7
3 — 2
4 — 2
5. — 15
6. — 3

30 times

1498-E

Duplicate of 1480-E ~~except that~~ ~~W.G. Rosin~~ USE W.G. Rosin also same as 1494-E except that W.G. Rosin is used.

Send 24 records to Miller

2009 Blanks made May 8.

100% O.K. in Blank Dept.

92 +% OK out of 732 Records.

79 2% OK out of 783 Records.

77% OK in Blanks.

[65]

1499-E

Ink	Blk			Drop test
OK	x	OK	x	
OK	x	OK	x	1. — 2
OK	x	OK	x	2. — 4
OK	x	OK	x	3. — 3
OK	x	OK	x	4. — 4
OK	x	OK	x	5 — 3
OK	x	OK	x	6 — 7
OK	x	OK	x	23 times
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x			
OK	x			
91%		100%		
		100%		
91%				

1499-E
Duplicate of 1484 except that wood is bottom up in Schultz O'Neil mill like 1497-E.
Use W. G. Rosin.
Send 24 Records to Millis.

89.3% OK out of 100 2 Records.
73 2/3% OK no Blanks.

1500-E 5/9/17.

OK OK	x	OK OK	x	Drop Test:
OK OK	x	OK OK	x	1. — 4
		OK OK	x	2. — 1
OK OK	x	OK OK	x	3. — 2
OK OK	x	OK OK	x	4. — 1
OK OK	x	OK OK	x	5. — 2
OK OK	x	OK OK	x	6. — 1
OK OK	x	OK OK	x	11 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK Chipped & Cracked		OK OK	x	
91%		100%		
83%		100%		

1500-E 57 lbs wood –
43 lbs chalk –
2 lbs lampblack –
10½ lbs Resin – (this is 7% of weight of 1500-E)
50 lbs alcohol –

Dry and grind these parts of above with one part of reground records
Send two loads to Willow

96% OK out of 1174 Records.
70+% OK on Blanks.

1501-E

5/9/17.

OK	x					
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
		OK	x			
OK	x	OK	x			
OK	x	OK	x			
91%		91%				
91%		91%				

Drop Test.

1 — 20
2 — 4
3 — 12
4 — 8
5 — 2
6 — 14

60 times

1501-E

Make up one drier pulp ~~[illegible]~~ 1479-E using ½ Norway wood and ½ regular department wood - note tests on each.

Much regular.

Send 24 to Miller.

85 9/10% OK out of 1037 Bends.
87.6% OK on Blanks.

1502-E

5/9/17.

OK OK	x	OK OK	x	Drop Test
OK OK	x	OK OK	x	1. — 20
OK OK	x	OK OK	x	2. — 20
OK OK	x	OK OK	x	3. — 20
OK OK	x	OK OK	x	4. — 8
OK OK	x	OK OK	x	5. — 8
OK OK	x	OK OK	x	6. — 5
OK OK	x	OK OK	x	81 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
100 %		100 %		
100 %		100 %		

~~1484-E Make up one drier full~~
~~1479-E using 1/2 Norway wood~~

1502-E.

Make up one drier full 1480-E using 1/2 Norway wood and 1/2 regular Dupont wood - same as 1501-E

Send 24 records to Miller.

92 % OK out of 1750 Records
90 1/2 % OK on Blanks.

79-a. 5/7/17

OK OK	x	OK OK	x
		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
		OK OK	x
		OK OK	x
100 %			x
100 %		100 %	
		100 %	

Drop tests

1 — 20
2 — 16
3 — 18
4 — 20
5 — 20
6 — 8
103 times

1503 — Hoffman's (no. 79.A)
Regular 1479-E) not screened.
2 rounds -
Mr. Edison says very rough surface - only used on regular moulds.
Indicates that the trouble is in the operation of screening,
without the old Crusher - ?

[75]

1504-E 5/9/17

Ok Ok	x	Ok Ok	x	Drop Test
Ok Ok	x	Ok Ok	x	1 — 6
Ok Ok	x	Ok Ok	x	2 — 4
Ok Ok	x	Ok Ok	x	3 — 9
Ok Ok	x	Ok Ok	x	4 — 3
Ok Ok	x	Ok Ok	x	5 — 3
Ok Ok	x	Ok Ok	x	6 — 2
Ok Ok	x	Ok Ok	x	27 times
Ok Ok	x	Ok Ok	x	
Ok Ok	x	Ok Ok	x	
Ok Ok	x	Ok Ok	x	
Ok Ok	x	Ok Ok	x	
100%		100%		
100%		100%		

1504-E
57 lbs wood flour
23 lbs chalk
2 lbs lampblack
10 lbs Rosin W.C.T.
50 lbs alcohol
Make one drum full.
Send 2 rounds to Miller for inspection and drop test.

97 5/9 % Ok out of 587 Rounds.
74% Ok on Blanks.

1505-E 5/10/17.

OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
OK OK	×	OK OK ×
100%		100%
100%		100%

Drop test
1. — 5
2. — 1
3. — 6
4. — 2
5. — 4
6. — 20
38 times

1505-E Screened
57 lbs wood fiber
43 lbs chalk
2 lbs campblack
11 lbs Rosin W.G.
50 lbs Alcohol
Make one chip full
Send ~~two~~ 20 rounds to Miller for inspection and drop test.

95-8% OK out of 1172 Records.
82 4/5% OK on blanks.

1506-E 5/9/17.

OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
		OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x		
91%		100%	
91%		100%	

Drop test

1. — 17
2. — 18
3. — 1
4. — 8
5 — 7
6. — 9

60

1506-E

Make 500 blanks from regular 1479-E Powder just as it leaves the mills without screening.

Keep record of % passing 180 screen and % passing 350 mesh screen as with the finished powder.

Print two prints from Mr. Edison's test moulds and also two rounds on a load of new moulds, also print the same on regular work for comparison. Deliver to Miller and balance report on separate,

495 blanks made 100 % in Blank Dept.
430 blanks OK on inspection 86 8/10 % OK.
403 Records inspected 96 5/10 % OK.
1 disc for parallel crack.
2 low spots.

fineness of powder { 91% 180 / 72% 350

Surface on unscreened blanks decidedly worse —

96.5% OK on of 403 records.
86.8% OK on blanks.

C817

1507-E 5/10/17.

OK	x	OK	x	Drop test		
OK	x	OK	x	1. — 1		
OK	x	OK	x	2. — 2		
OK	x	OK	x	3. — 1:4		
OK	x	OK	x	4. — 9		
OK	x	OK	x	5. — 6		
OK	x	OK	x	6. — 4		
OK	x	OK	x	36 times		
OK	x	OK	x			
OK	x	OK	x	1507-E Saturday 5/12/17.		
OK	x	OK	x	OK x	OK x	Drop test
OK	x	OK	x	OK x	OK x	1 — 1
				OK x	OK x	2 — 1
100 %		100 %		OK x	OK x	3 — 12
				OK x	OK x	4 — 4
100 %.		100 %		OK x	OK x	5 — 1
				OK x	OK x	6 — 2
				OK x	OK x	21 times
				OK x	OK x	
				OK x	OK x	
				OK x	OK x	
				OK x	OK x	
				100%	100%	
				100%	100%	

1507-E -

One dierfull -
57 wood,
43 chalk,
2 lampblack
12 Rosin
1 (ounce) castor oil
54 lbs alcohol -
Send 2 rounds to miller for inspection and drop test.

94.9 OK out of 984 Recorded
87.5 on Blank.

1508-E 5/9/17

OK	x	OK	x	Drop Test		
OK	x	OK	x	1. — 3		
OK	x			2. — 8		
OK	x	OK	x	3. — 1		
OK	x	OK	x	4. — 11		
OK	x	OK	x	5. — 2		
OK	x	OK	x	6. — 10		
OK	x	OK	x	3.5 times		
OK	x	OK	x			
OK	x	OK	x	1508-E		5/10/17
OK	x	OK	x	OK x	OK x	Drop test
OK	x	OK	x	OK x	OK x	1 — 5
				OK x	OK x	2 — 1
100%		91%		OK x	OK x	3 — 2
				OK x	OK x	4 — 5
100%		91%		OK x	OK x	5 — 13
				OK x	OK x	6 — 20
				OK x	OK x	4.6 times
				OK	OK x	
					OK x	
				OK x	OK x	
				OK x	OK x	
				83%	100%	
				83%	100%	

1508-E

Make up one drier full regular 1479-E powder except run drier for a shorter time to leave a trace of alcohol in powder and send Miller schedule on which it is run to pent in Broth. also 2 rounds records for inspection.

Drier Run 2 hours - Temp powder when vacuum broke 138° F highest point. Powder given flame test. no alcohol indicated, altho powder seemed damp. glass on drier had beads of moisture on inside.

Moisture test 1.6%

Grinder sample 90% 180 77% 350
Moulding sample 97% 180 88% 350
936 blanks made 100% OK. in Blank Dept.
77.2% OK on inspection
724 Records inspected 86.5% OK.

94.3% OK out of 672 Records.
78.8% OK on blanks.

1509-E

5/19/17.

OK OK	x	OK OK	x	Drop Test
OK OK	x	OK OK	x	1. — 4
OK OK	x	OK OK	x	2. — 16
OK OK	x	OK OK	x	3. — 11
OK OK	x	OK OK	x	4. — 13
OK OK	x	OK OK	x	5. — 2
OK OK	x	OK OK	x	6. — 7
OK OK	x	OK OK		53
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
100%		100%		
100%		91%		

1509-E

Same as 1506 except run thru final screen.
Note time from mill to mixer.
25 minutes from mill to mixer

97% OK out of 700 Pounds. do
96% OK on Floor.

1510-E 5/10/17

OK OK	x	OK OK	x	Drop test
OK OK	x	OK OK	x	1 — 7
OK OK	x	OK OK	x	2 — 1
OK OK	x	OK OK	x	3 — 8
OK OK	x	OK OK	x	4 — 4
OK OK	x	OK OK	x	5 — 4
OK OK	x	OK OK	x	6 — 5
OK OK	x	OK OK	x	29 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
100%		100%		
100%		100%		

1510-E

57 wood
43 chalk
2 lampblack
13 lbs rosin (1 rosin)
50 lbs alcohol
Make one drier full
Regular all than —

1511-E

5/16/17.

OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
Pull Outs & Mus's	
91%	
91%	
Drop tests	
1 — 20	
2 — 20	
3 — 20	
4 — 20	
5 — 20	
6 — 20	
120	

Every one of these records has a fine surface, no cracks. But all have a run out made by dots which can be seen by Eye — These are undoubtedly due to the balled up Cotton flock

a long hair not a pull out

Hoffman says, Moulds working with Tamin self-blade removes 1/16 above mould rings Secure 1/4" strike off - leaves moulds clean Run on 1261 schedule Blanks Calliper 217 to 225 12 Blanks made all OK 100% — too thin

Records Calliper
180 — 189 — 187.1
Too thin

1511-E

Take some regular powder screened, put in some Cotton flock — For Every 16 lbs of Reg powder add 1 lb of flock Mix it thoroughly in the Mixer, Make 12 Good blanks —

Print on new moulds or Comparatively new moulds —

[91]

Wait—

1512

Make One Dryer full
of powder Regular, Except
~~add~~ Make it 3½ wood
½ Cotton flock 3 Chalk
& Reg Preparation of
Resin — Screen &
Run Reg ~~[illegible]~~
& Send 24 to Edison

1513-E 5/15/17

OK OK	x	OK OK	x	Drop test
OK OK	x	OK OK	x	1 — 1
OK OK	x	OK OK	x	2 — 2
OK OK	x	OK OK	x	3 — 5
OK OK	x	OK OK	x	4 — 1
OK OK	x	OK OK	x	5 — 4
OK OK	x	OK OK	x	6 — 1
OK OK	x	OK OK	x	14 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
100%		100%		
100%		100%		

1513-E
Same mix as 1505-E but dried like 1508-
Make one drier.

1514-E

5/15/17

OK	x	OK	x	Drop test
OK	x	OK	x	1 — 2
OK	x	OK	x	2 — 3
OK	x	OK	x	3 — 3
OK	x	OK	x	4 — 1
OK	x	OK	x	5 — 2
OK	x	OK	x	6 — 1
OK	x	OK	x	12 lines
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
100 %		91 %		
100 %		91 %		

1514-E

Same as 1505-E but use one half Dupont and ½ Norway wood, Maine one drier full

1515-E

OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x
OK	x

91%

91%

1515

Duplicate 1511 but use for Every 16 lbs of Reg mix only 1/2 lb of Cotton flock —

Run same as 1511 —

OK	x	Calliper	172.1
OK	x		181.1
OK	x		175.1
OK	x		170.1
OK	x		181.1

New moulds used, surface fair very few cracks, Micro shows moulds themselves has big scratches, Round disc marks fore + many other defects + rough looking smooth part.

Drop test all went 20 one we dropped 100 times this showed a radial crack very fine from edge not reaching metal + would pass. Continued dropping till went 300 didn't break

We now drop at 5 ft on hard floor. Broke on 35th drop

Entirely too much flock 1/4 of amount probably lost it

1516

Dallas Machine, Cotton flock thru resolving screens flock falling into mixer — to 450 grm Reg Mix, dry added 21 @ 22 grams flock

4 @ 5 blanks made —

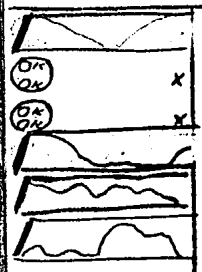
Print on Reg Moulds

Make test for surface & Drop Test

Printed on New Moulds

Notice on broken Edges one clot fibre 1/32 dia —

1517-E



Drop test	Calipers point
1 — 20	.184.1
2 — 20	.189
3 — 19	.186.1
4 — 20	.190
5 — 20	.195
6 — 20	
119	191

Mfg Edison Remarks.
One after drop [illegible] was thrown onto floor 7 times hole.
Notice several specks more white small clots of fibre also fibre poorly distributed

1517

Dup of 1516 — but only 15 grams flock -

1518-E 5/2

OK OK	x	Dup. tab		Bulfpro points
OK OK	x	1	20	.207
OK OK		2	20	.205.1
OK OK	x	3	20	201.1
		4	20	.207
OK OK	x	5	20	.208
OK OK	FERNS	6	20	.206
			120	

1518

Dup 1516 –

But only 10 grams flask

[105]

1519-E

5/2/117

		Drop test	Calipers prints
OK OK	x	1 — 8	.203.1
OK OK	x	2 — 8	.206.1
OK OK	x	3 — 20	.209
OK OK	x	4 — 20	.206
OK OK	x	5 — 20	.203
OK OK	x	6 — 3	.203
		79	

1519 —

Dup 1516 —

But only 5 grams flock

1520 5/12/17

		Drop test	Calipers points
OK OK	x		
OK OK	x	1 — 4	.195
OK OK	x	2 — 9	.193.1
		3 — 20	.207
		4 — 20	.208
OK OK	x	5 — 20	.205.1
OK OK	x	6 — 20	.211
		93	

1520

Dup of 1516 — But no flock at all

1521-E

		Drop test		Calipes points
OK JN	x	1. —	20	.203
OK JN	x	2. —	20	.216
OK JN	x	3. —	20	.211
OK JN	x	4. —	20	.196
OK JN		5. —	20	.216.1
OK JN	x	6. —	20	.199
OK JN	x		120	

1521 E

Hoffman grinds some powder in Mill at Storehouse mixing flock gradually in the Mill as powder is being ground

Make 1/2 doz blanks + print -

Add 6 grams flock for each lb of powder

C111J

1522-E

6/5/17

		Drop. Test.	Califico points
OK OK	x	1 — 20	.202
OK OK	x	2 — 20	.187
OK OK	x	3 — 20	.191.1
OK OK	x	4 — 20	.187.1
OK OK	x	5 — 20	.191.1
OK OK	x	6 — 6	
		106 turns	
100%		Surfaces bad due to dots	
100%		of fibre.	

1522-E Duplicate of 1516-E

Except Cotton stock, separate with a different machine

20 grams of fibers to 150 pounds

6 hands of seen fibers

send to Editors

1523-E 6/6/17

		Drop test	Caliper point
OK QA	x		
OK QA	x	1 — 20	.202
OK QA	x	2 — 20	.200
OK QA	x	3 — 20	.209
OK QA	x	4 — 20	.188.1
OK QA		5 — 18	.193
OK QA		6 — 20	.191.1
		118 times	

Surface fuse all fire Rund Pu
due to dots in fire

1523-E Dup. of 1522-E
Except 15 grams of flock
6 blanks of each

C115J

6/6/17

1524-E

	Drop test	Calipers points
OK OK x	1 — 20	.185.1
OK OK x	2 — 15	.192
	3 — 20	.193.1
OK OK x	4 — 12	.190.1
OK OK x	5 — 20	.194.1
	6 — 20	195.1
	10.7 turns	

83%

53%

1524-E Dup of 1528-E
Except 10 grains of flock.
6 blanks of wads

1525-E

		Drop	test	Calipro points
OK OK	x			
OK OK	x	1	— 20	194.1
OK OK	x	2	— 20	197
OK OK	x	3	— 13	194
OK OK	x	4	— 20	199.1
OK OK	x	5	— 20	204.1
		6	— 20	192.1
			113 turns	

1525-E Dup of 1522
Except 5 grand of flock
6 blanks of each

1526-E

		Drops lost	Calibrated points
OK OK	x		
OK OK	x	1 — 20	197.1
		2 — 20	202.1
OK OK	x	3 — 4	205.1
OK OK	x	4 — 20	190.1
OK OK	x	5 — 16	[illegible]
		6 — 6	195.1
91%		86 trials	
91%			

1526-E Blanks made into out flocs.

6 blanks of each.

1527-E

6/8/17

	Drop	Tests	Calibre points
	1. —	20 Chip-pied on Edge	179
×	2. —	20	173.1
×	3. —	20	174
	4. —	20	182
×	5. —	20	167
	6. —	20	166.1
83%		120 tries	

75% Surface Run Outs in every one of tries.

1527-E

450 grain powder 20 grain flock pieces in Day Imperial Bullet (Broad Heads) run for 1½ hrs. thru fine triangle 20 mesh screen 30 to 50 grades premanned on screens, Cotton flock are spread up powder so flocks found

1528-E 6/5/17

	Drop test	Califes points
	1. — 20	.181.1
	2. — 20	.183
	3. — 20	.185.1
	4. — 20	180.1
	5. — 20	.178
	6. — 20	.177.1
	120 times	

16%

16%

1528-E

450 [illegible]

[illegible] through

20 mesh screen, 5 to 6% [illegible]

of flocks [illegible]

CQS

6/8/17

1529-E

OK OK ×

OK OK ×

OK OK ×

OK OK ×

OK OK ×

OK OK ×

OK OK ×

OK OK ×

OK OK ×

75%

75%

1529-E

Varnish [illegible]

[illegible] Varnish with the 2nd Coat, Put in Oven, and [illegible] there out with my [illegible].

After you have [illegible]

1530-E 6/8/17

	Chop.	Feet	Calipes points
		20	.189
		20	.195
		20	.194.1
		20	.215.1
		20	.195.1
		20	.212.1
		120	

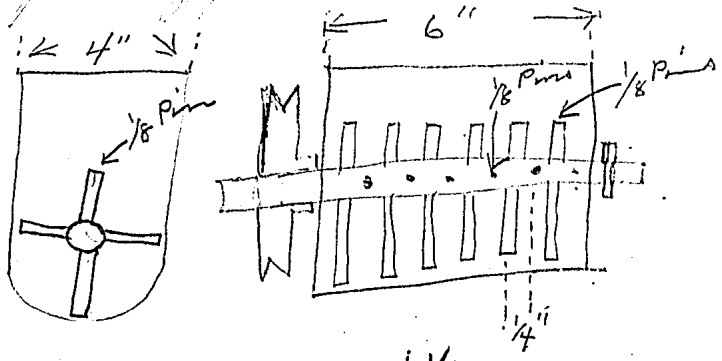
75%

75%

1530 E

450 gauge bowls [illegible]
Put in Hulls, [illegible]
Speed 1700, [illegible]

Put [illegible] gauge [illegible]
4 gauge of [illegible]



3 1/4 Blocks
10000

6/8/17.

1531-E

OK x
OK x
OK x
OK x
OK x
OK x
OK x
OK x
OK x
OK x
OK x
OK x
OK x

1000

1531-E

Take 12 blanks that have been varnished and baked regular and revarnish and bake again and then print regular. Varnish two extra blanks and send them down to Willa with the prints.

C131J

1532-E 6/5/7

		Drop test	Calif. co. point
OK	x		
OK	x	1. — 20	.200.1
OK	x	2. — 20	.196.1
OK	x	3. — 20	.197
		4. — 20	.207.1
		5. — 20	.199.1
		6. — 20	.202
53%		120 turns	
53%			

1532E Duplicate of 1530E
Except used 5 grains of Bullseye
450 Powder at little less than
2 grains short remaining on 20
fresh powder

1533-E 6/8/17

Drop test	Calipers points
1. — 20	.201
2. — 20	.184
3. — 20	.1941
4. — 20	.196.1
5. — 20	.195.1
6. — 20	.194.1
120 times	

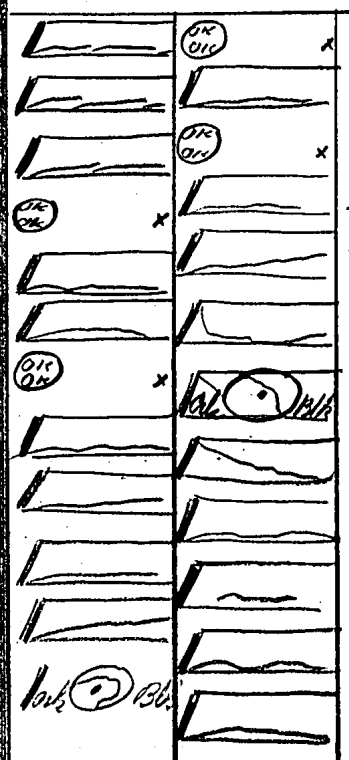
1533-E

Drop of 1533 Graft used 15 [illegible] 458 [illegible] pounds 5½ No 8 gloves [illegible] on pouch.

C135J

1534-E

6/12/17



Drop test

1. — 20
2 — 8
3 — 2
4 — 4
5 — 10
6 — 20

64 times

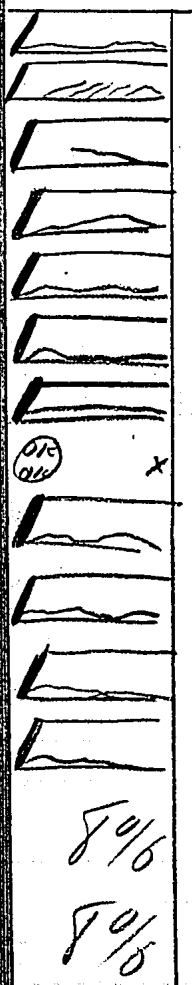
1534-E

57 lbs wood filler
43 lbs chalk
2 lbs lampblack
1 1/2 lbs Rosin
50 lbs Alcohol

Make 4 driers full—
send two rounds to Millin for
inspection and drop test.

35.2% OK out of 3048 Rounds
96.5% OK no blanks.
44.7% OK out of 1728

1535-E



1535-E

Make two dryers regular 1505 powder but after mixing dry in Imperial mixer run thru the Schultz O'neil Mill and then put back in imperial mixer after weighing carefully and mix gum regular way.

Make regular send 2 rounds to miller in Building 4 —

44.5% OK out of 1246 Records.
64.4% OK on Blanks.

1536-E		1536-E-2 6/15/11	
		1536-E-2	1536-E-2
	Dark (E) Blk		
OK Oil		OK Oil	
		OK Oil	
		OK Oil	
		OK Oil	
		OK Oil	
		OK Oil	
		OK Oil	
		OK Oil	
	OK Oil		
8%	8%	41%	75%
8%	8%	41%	75%

1536-E -

Notice five driers regular 1505-E powder but run all of the wood flour thru the Schultz-O'neil mill before mixing to break it up thoroly.

Make regular - send 2 rounds to miller in Building 4 -

Send 500 blanks to Kinder marked 1536-E-2 which you will mould on the old schedule - 2 rounds of this also to miller.

C141J

1537-E

	Drop test	Bulk in points
	1 — 20	.191
	2 — 20	.193
	3 — 20	.191
OK	x 4 — 20	.202
OK	x 5 — 20	.202
OK	x 6 — 20	.191
OK	x 120 trials	

83%

85%

1537-E

Drop of 1530-E Coeff.
used 10 grams Raw Cotton flock.
1½ grams flock remained on screen.
Raw flock was longer fiber

1

2

1538-E

OK OK	x	
OK OK	x	
OK OK	x	
OK OK	x	
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	
OK OK	x	
OK OK	x	
		OK OK x
OK OK	x	
53%		41%
53%		41%

Drop test

1 — 3
2 — 15
3 — 1
4 — 3
5 — 10
6 — 6

38 times

1538-E

~~Add~~ about 1% of cotton flock from sample obtained by Mr Hanlon to the powder (1505-E) as it is fed to the mill — about 1700 lb powder made — no clogging of mill screens. Mould and varnish and print regular. Send 6 blanks to mills and 2 varnished blanks and two rounds for inspection and drop test.

Cotton flock does not separate on screening
60.3% OK out of 648 Records.
95.1% OK on blanks.

6/12/17.

1539-E

		Drop test
OK OK x	OK OK	1. — 3
OK OK x	OK OK x	2. — 2
OK OK x	OK OK x	3. — 1
		4. — 8
OK OK x		5. — 1
OK OK x	OK OK x	6. — 1
	OK OK x	16 times
OK OK x	OK OK x	
	OK OK x	
OK OK x	OK OK x	
68%	68%	
68%	58%	

1539-E

Add about 2% of cotton floc to the powder as it is fed to the mills. (One pound to each bag of unground powder.)

Mould, varnish and print regular. Send six blanks to Miller also two varnished blanks and two rounds of records for inspection, t. and drop test.

35.2% OK out of 761 Records
96.2% OK. on blanks.

1540-E

OK OK	
	OK OK
	OK OK
OK OK	
16%	16%
16%	16%

1540-E

Make one drier full 1505-powder from Dupont wood flour that has been dried in vacuum drier. Make test of % of moisture remaining in the wood flour.

Make test of moisture remaining after powder is dried.

Mould and varnish and print regular.

Send two rounds to Miller -

Send Miller result of moisture tests.

This wood flour is to be broken up by passing thru 8 mesh screen before drying.

Moisture in Wood 1.1%
Powder No Moisture

1541-E

6/15/17

OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	
OK OK	x	OK OK x
OK OK	x	
OK OK	x	
OK OK	x	
OK OK	x	
OK OK	x	
91%		41%
91%		41%

Drop Test

1 — 1

2 — 1

3 — 1

4 — 4

5 — 1

6 — 1

total 9 times

1541-E

Repeat 1539-E with wood flour that has been broken up by passing thru the 8-mesh screen and then dried in the vacuum drier – like 1540

Wood – 45 Moisture

Powder No Moisture

549 the print no signs of wear on Mould

1542-E

2-Moulds made with nickel preliminary plating .010 thick - backed up with copper - Send the 3d - 20th - 40th and every 20th print also last print to Miller for Mr. Edison.

1543-E

6/13/17

1543 E

Print 12 blanks just as they are without side square edge Edging — Varnish Regular

Worse

C1553

A	B

This Mould was called of after making 335 prints and discarded for Mottled Surface had Mr Edison & Mr Dunwoddie listen Surface sound good but Mottled back on bagging.
405 prints Good Surface.
503 prints 3/4 inch pin crack Ok.
625 prints Surface seems to be getting better no signs of wear.

818th Print call off for Mottled Mould shows no sign of wear.

6/3/17

1545E

Nickel on their Moulds 007

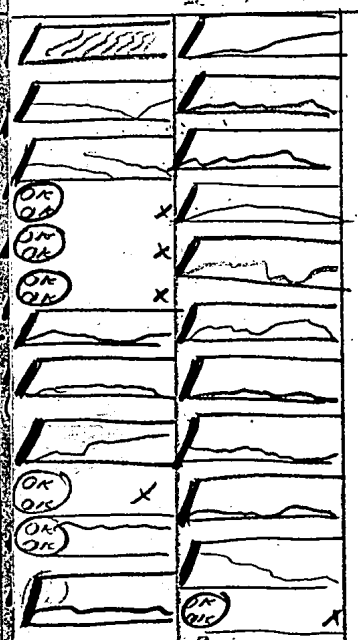
This is a Nickel Mould, both sides 10th print & 138th print both have smooth contemporaneous general surface, but both have cracks very considerable more on 138th than on 10th & but not very much, I notice Mottled is larger on 138th than 10th, the 10th is hard to see while 138th is easy to see the pressure has increased their size

On both are large O pits varying from 005 To 020, all are generally round. The moulds show scratches probably in 2nd measles, Pits may be also – The waves of 138th seem to be absolutely uninjured at start & not scratched with finest scratches like Copper Moulds –

260th does not show a single scratch & seems absolutely uninjured

Mottle seems larger.

1546-E 6/13/1



1546-E Dup. of 1505-E

Except half Norway Wood & half Dupont Wood. Dupont wood screened through #4 screen

Mostly Dow & print regular.

Du Pont wood is very wet —

C1613

1547-E

		Caliper points
OK OK	FERNS	
		.207
OK OK	x	.199
OK OK		.204
OK OK	x	.200.1
OK OK	x	.191.1
OK OK	x	195.1
OK OK	x	
OK OK	x	

66⅔% Comd

50 perfect

3 blanks were ok before Varnishing but after Varnishing they showed Edge Cracks before they went in the oven

Have the samples

1547 E

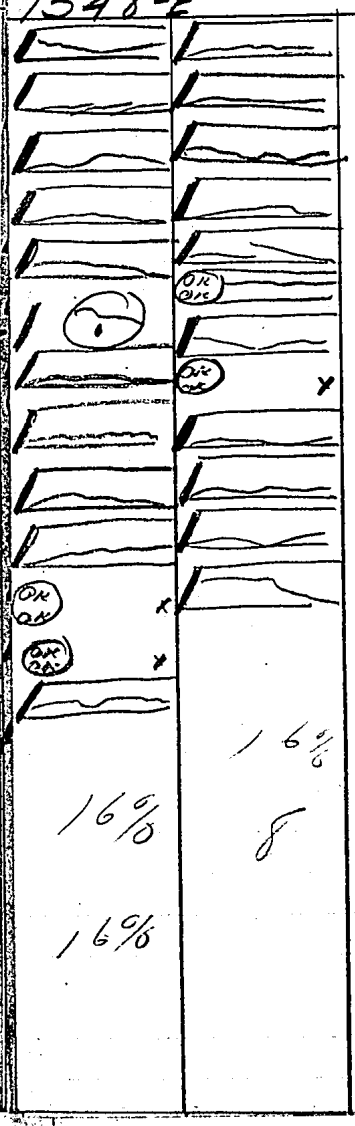
Hoffman

Dally takes enough powder (req) & puts in 1% (about) of Raw Cotton fibre -

Make 12 Blanks, Edge Print & Varnish Regular

6/18/17

1548-E



1548E

Duplicate 1531
print 24 blanks

1549-E

4/13/19

Inspected up-stairs

Recd.	Cracks.	Oks.	
72	66	6	7½%
60	41	19	32
192	166	26	14%
84	65	19	22%
408	338	78	

17.15% OK.

12½%
8%

1549E

Printed with border pressure at 110 at regulator instead of 120.

Run pressers this way for 3 hours

14.3% OK out of 944 Records.

1 to 9 3

7.2% OK out of 838 Records printed on Regular stairs Pressure 120 lbs.

6/13/17

1550-E

1550 E

Regulator set at 100 degrees steam instead of 120 as regular — print on other work process 3 hours

8.9% OK out of 381 Records

6/15/17

1551 E

Moulds with fixed lines on Edge —

No Good.

1552-E

		Calipers points
OK	×	.209
odk (1) Blk		.224
OK	×	.208.1
OK	×	.212
		.234.1
		.223
odk (1) Blk		
85%		
25%		

Note 2 blanks Cracked clear across

1552-E

8 lbs powder

Add 1/2 of Air slaked Lime — & mixed thoroughly

Gas & Acid regulates

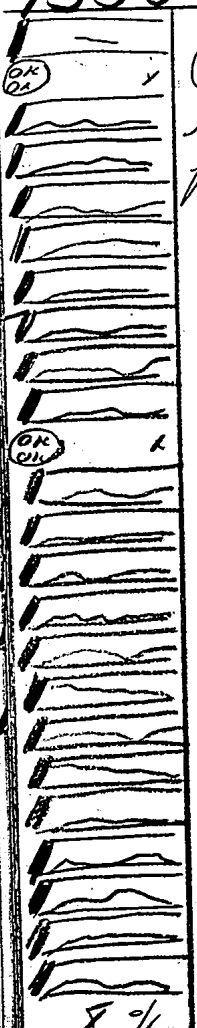
Slab line out of Bottle in Chemical room.

Made 7 blanks

Mr. Gray the Night Supt said these blanks showed numbers of little white specks in surface before being varnished

6/13/17

1553-E



This Experiment was run on 750 hydraulic pressure instead of 850

no Better

21 % OK out of 420 Records

1554-E

Regular Blanks made to day 6/13/17

put through Dropper test

1 – 2
2 – 4
3 – 4
4 – 1
5 – 2
6 – 1
7 – 1
8 – 1
9 – 2

18 times

average 2 drops each

6/15/17

1555-E

Pck Blk

Pck Blk

Pck Blk

6 blanks rejection account of cracks

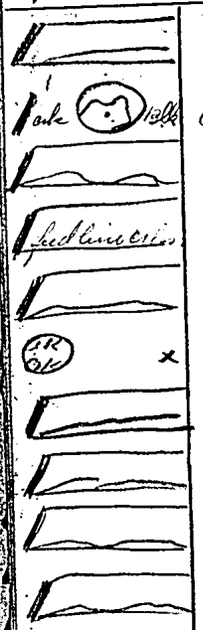
1555-E

12 blanks loaded in center and rated off toward edges all around

Mr. Gray reports that blanks developed cracks before varnishing 3 cracked when varnished on one side & 2 cracked in oven

6/15/17

1556-E

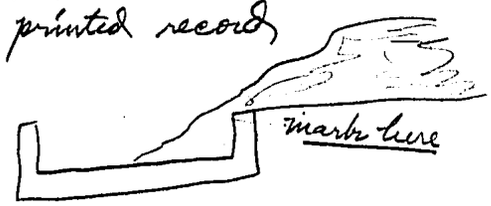


2 blanks not printed due to orders.

8.

1556-E

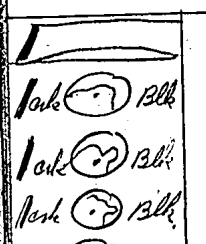
12 blanks loaded on one side as usual and that side marked so that we will know it on the printed record



2 blanks duplicate orders on Order.

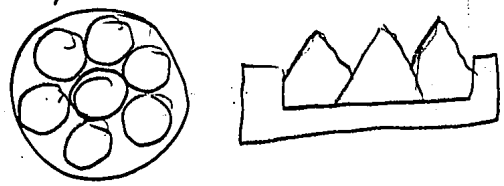
1557-E

6/15/17



3 blanks after Varnishing
show ones near the Edge
did not print threw

1557-E
Load 12 blanks in seven little conical piles and then strike off.



6/15/17

1558-E

OK OK ×

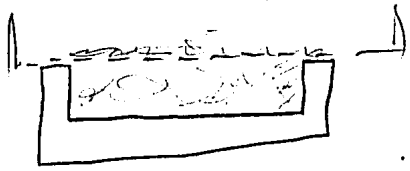
OK OK ×

16%

16%

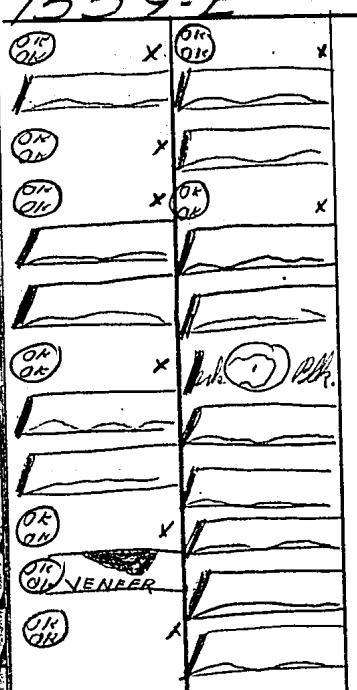
1558-E

load 12 Blanks then run 8-mesh sifter and then strike off as usual-



6/15/17

1559-E

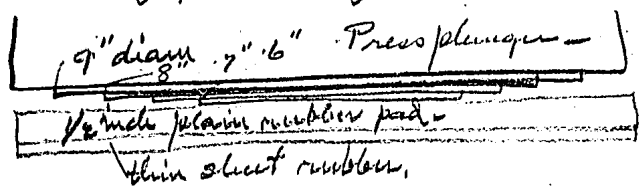


58% 16%

50% 16%

1559-E

Make 24 blanks with discs of cardboard used to build up the center of plunger of the rubber press.



C(85)

6/15/17

1560-E

OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
FERNS	
75%	
75%	

Out is 83%

See also following 1580E Book #22

1560-E

Make 12 blanks - with a piece of felt on blanks in place of the thin rubber in the rubber press,

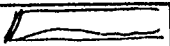
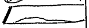
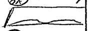
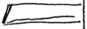
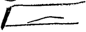
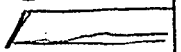
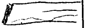
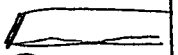
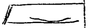
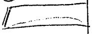
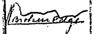
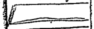
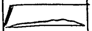
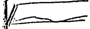
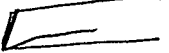
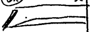
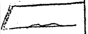
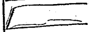
1560-E Made as Regular Sheets

OK OK x	OK OK x		OK OK x
OK OK x	OK OK		OK OK x
	OK OK x	OK OK x	OK OK x
		OK OK x	OK OK x
		OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
	OK OK x	OK OK x	OK OK
	OK OK x		
	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
	OK OK x		OK OK x
	OK OK x		
OK OK x			
50%	91%	58%	66%
50%	83%	58%	58%
47.2% OK out of		44 Records	66.6.

700 lbs pressure on Rubber press	630 lbs on Rubber press
1561-E	1562-E
	OK OK ×
OK OK ×	
	OK OK ×
	OK OK ×
	OK OK ×
	OK OK ×
	OK OK ×
	OK OK ×
OK OK ×	
16%	58%
16%	58%

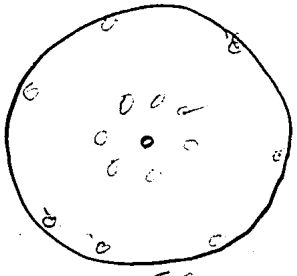
1561-E	12 blankets	700 lbs	Rubber Press pressure on	16%
1562-E	12 "	630 "	"	58% Bam.
1563-E	12 "	560 "	"	66%
1564-E	12 "	490 "	"	83%
1565-E	12 "	420 "	"	41%
1566-E	12 "	350 "	"	50%

Send all to Miller for inspection — Regular 1505-E in every way except variation of pressure on rubber press, should varnish and print regular —

560 lbs pressure 1563-E	490 lbs pressure 1564-E	420 lbs pressure 1565-E	35 lbs pressure. 1566-E
OK OK x	OK OK x	OK OK x	
	OK OK x		OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x		
		OK OK x	OK OK x
	OK OK x		
OK OK x	OK OK x	 Broken edge	OK OK x
OK OK x	OK OK x		OK OK x
OK OK x			OK OK x
OK OK x	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
	OK OK x		
66%	83%	41%	50%
66%	83%	41%	50%

1567-E

Make screen tests on powder taken from near the center and from within ½ inch of the edge of a blank just as it comes from the rubber press,



samples near center

samples near edge

Edge	98%	180
	74%	350
Center	98%	180
	74%	350

evidently motion of powder and air toward the edge causes no segregation —

June 15-17

Discovery of an important Principle

The powder in the rubber packing-press must be considered as a mixture of powder and air, and we must get rid of the air.

Note 1560-E and further experiments in

BOOK 22

[ITEM(S) FOUND IN BOOK]

Vacuum dryer system changed to water cool Apr 24.

Vacuum dryer system changed to decrease exhaust pressure Apr 24

Vacuum dryer system changed to double exhaust several weeks earlier.

[ITEM(S) FOUND IN BOOK]

210
199 / 215 — 1207
204

189
198 / 195 — 199
209

207
195 / 213 — 204
200

212
208 / 193 — 200-1
188

189
187 / 196 — 191.1
194

209
205 / 182 — 195.1
201

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 22
Notebook, N-17-06-15

This notebook was used by William W. Dinwiddie, Archie D. Hoffman and possibly other experimenters during June-July 1917 for notes on efforts to improve Edison disc records. There are numerous comments by Edison on the work performed. The entries pertain primarily to a sequence of experiments numbered from 1568E through 1656E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients. Some tests involve records printed with nickel faced molds. The entries generally consist of instructions by Dinwiddie or Hoffman describing the experimental records wanted, accompanied by evaluations of the test records based on durability, thickness, and edging. In one entry Edison criticizes Dinwiddie and others for their experiment planning, while in another he complains that his "instructions were not followed in this experiment." The front cover is labeled "Disc Record" and "22"; the back cover is labeled "22." The pages are unnumbered. Approximately 190 pages have been used.

1568-E

JA. 11. ✓

JK. 21. ✗

16%

16%

1568-E

Make 12 blanks made in regular way but pat pondub down by hand the old way we did to get air out,

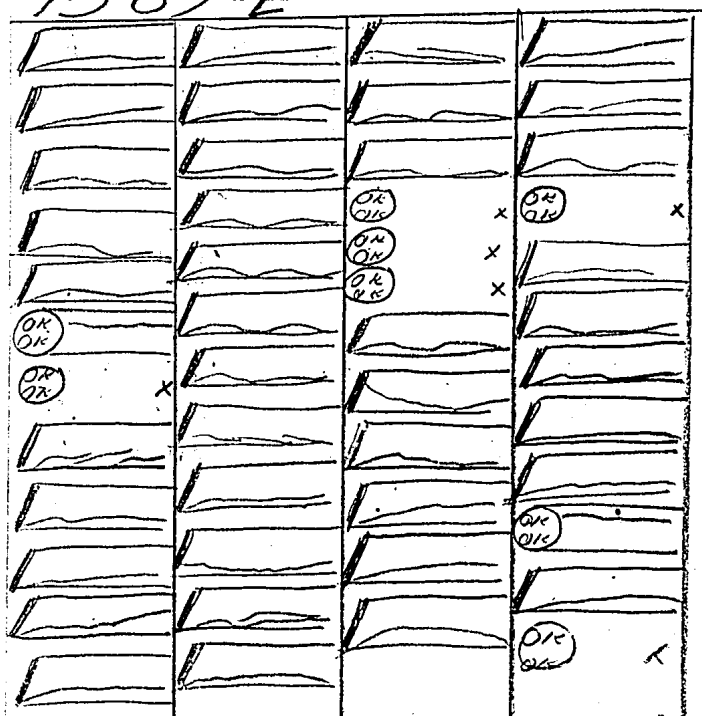
Send up to Varnish & print regular.

This patting was done too late in the process to do any good — after the packing print.

a)

6/15/17

1569-E



16%   25%   25%

8%   25%   25%

Average percentage
10.6%-m.

1569-E
Duplicate 1560-E
but make 48 blanks &
send up for varnishing
& print as soon as possible

The felt used in this experiment
was all cotton - The felt used
in 1560-E was all wool -
The gray felt used in 1570 was
part cotton and much poorer quality
than the red felt used in 1560 -

6/15/17.

1570-E

OK OK	OK OK	
OK OK	OK OK	
	OK OK	
	OK OK	
OK OK	OK OK	
	OK OK	
	OK OK	
	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK		
OK OK		

2 blanks discarded for cribs.

66.6% Cam

66.6% Perfect

1570-E

Make 100 blanks with double thickness of gray felt in place of the thin rubber in the rubber press. send 24 prints to Millie

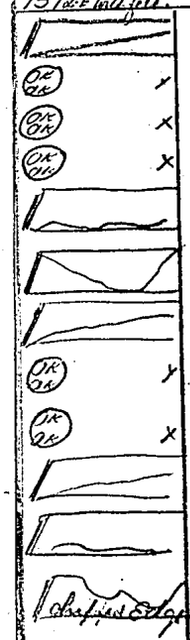
OK OK		OK OK	
OK OK	OK OK	OK OK	
OK OK		OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK		OK OK	
OK OK	OK OK		
OK OK	OK OK	OK OK	
	OK OK		
OK OK	OK OK		
OK OK		OK OK	
91%	66%	75%	average percentage 73.3%
91%	66%	75%	

[5]

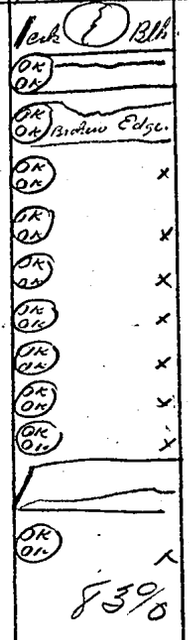
1571-E 6/18/17

OK	×
OK	×
OK	×

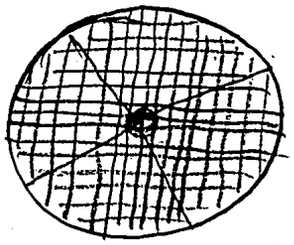
1572-E with felt.

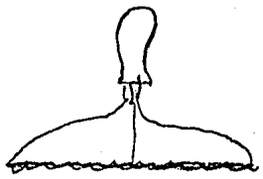


1572-E with thin rubber



1572-E





disc of wire mesh with handle used to spread the powder down before laying on the thin rubber — Made 24 blanks

24 made with thin rubber in packing press —

24 made with thin felt like 1560

Only made & finished 12 of each

Refer to 1575 and 1585

6/18/17.

1573-E

FERNS

Indigenous.

1573-E Refers 12 blocks that have been made [illegible] bows — Reg. schedule.

Seed up - stems [illegible] & fruit regular.

C113

6/18/17

1574-E

OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
83%		100%	
83%		100%	
Average percentage			
91.6%			

1574-E

Make 24 blanks using flat rubber and one thickness red felt same as the felt used in 1566-E

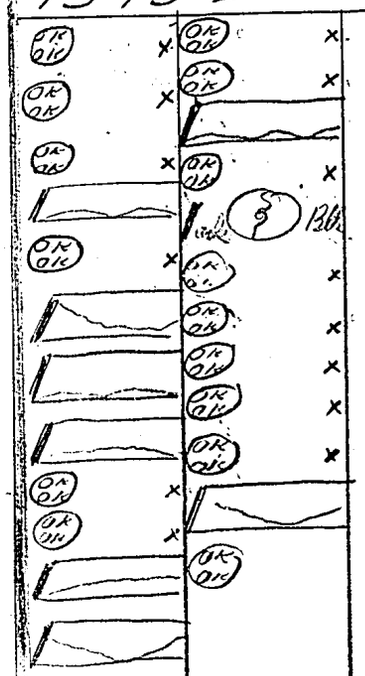
Bring the press up as slowly as possible and hold at full pressure about 10 seconds,

varnish and print regular.

Send to miller —

6/18/17

1575-E



41% 75%

41% 75

62.5%

1575-E

Capping machine with magnet removed and a flat plate 1/8 smaller diameter than the mould in place of magnet. – 1/4" holes drilled all over plate 1" apart – and a piece of close mesh heavy wire screwed on face of plate.

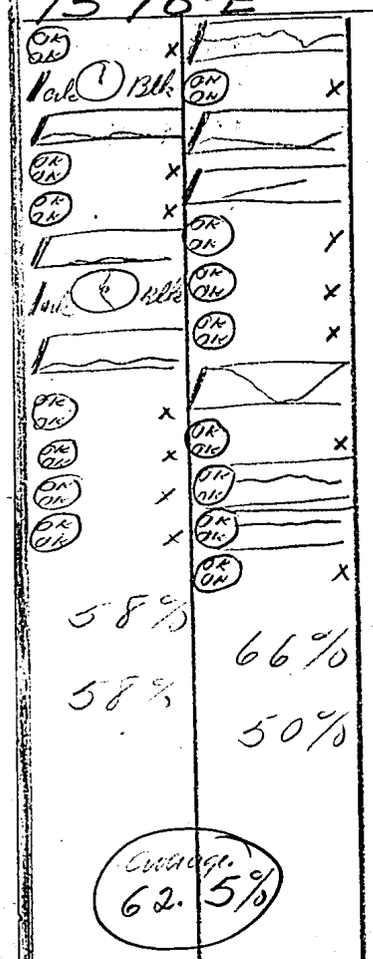
Operate same as hand tool in 1572-E – Make 24 blanks varnish and print regular send all to Miller –

use the thin rubber sheet in packing press

Refer to 1585

6/18/17

1576-E



1576-E

Same as 1575-E except that piece of soft thick felt from American Felt co is used on the wire ~~[illegible]~~ mesh of the plate, ~~use~~ the thin rubber sheet

6/18/17

1577-E

	OK OK ×
OK OK ×	
OK OK ×	OK OK ×
OK OK ×	OK OK ×
OK OK ×	OK OK ×
OK OK ×	OK OK ×
Total 13 lbs	OK OK ×
OK OK ×	FERNS
OK OK ×	OK OK ×
OK OK ×	OK OK ×
	OK OK ×
	Total 13 lbs

77.2%

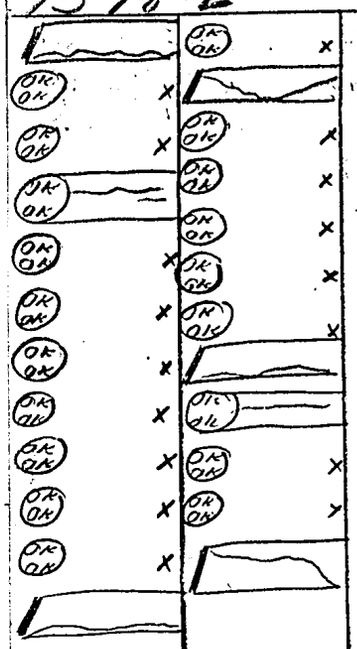
1577-E

Same as 1575-E except that red felt same as original 1560-E experiment is used on the wire mesh.

Use thin rubber sheet in packing press.

6/18/17.

1578-E



83%

75%

75%

75%

79.1%

1578-E

Same as 1575-E except that red felt (same as used in 1560-E) is laid on the powder and left on in the packing press.

C21J

6/18/17

1579-E

OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	
91%	91%
91%	91%

91.6

1579-E

Same as 1578-E except that special bevel loading ring is used to stop lights

bevel instead of ~~[illegible]~~ continued straight side of mouldy

6/19/17

1580-E		1580-E with felt	
58%	66%	75%	75%
58%	66%	75%	75%
62.5		75%	

1580-E

Center of soft rubber pad perforated same as 1571-E — Top plate of press counterbored opposite holes in rubber and coarse wire mesh laid in counterbore 5 - 1/4-inch holes drilled thru plate to wire mesh and groove cut across top surface of plate with cape chisel to vent.

Send first 3 Pounds to Miller

Did not work as expected - when cemented to top plate of press rubber pad seems to close — Worked like 1560 when felt was used with it.

1580-B

25%
25%

1560-E

American Felt Co. Soft felt

50%

50%

6/19/17

American Felt Co. Hard

100%

100%

93 5/8% Ok out of 123 Rounds

Edging Report

	O.K.	Re Edge.	Miss
1st Cut	68	33	7
2nd Cut	87	4	2
3rd Cut	4	0	0
	99	37	9

Totals 91.6%

1560-E white felt

Standard Felt Co

100%

100%

88 1/3% Ok out of 118 Rounds

Edging Report

	O.K.	Re Edge	Miss
1st Cut	69	39	5
2nd Cut	34	2	3
3rd Cut	1	0	1
	104	41	9

	Edged
1st Cut	113
2nd Cut	39
3rd Cut	2

92.0%

6/19/17

Green Felt.

100%

91%

6/20/17

1581-E

OK OK	x
OK OK	—
OK OK	x
OK OK	x
OK OK	x
OK OK	x

3 blanks. not printed due to cracks after baked.

50%

41%

1581-E

Same as 1571-E except that the wire mesh is attached to the plunger of the press.

1581-E-B Same as 81 except that holes in press plunger are stopped up with cardboard so that air does not escape thru the center — but only on sides — which makes it about the same as 1571-E

OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
	OK OK x
	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x
	OK OK x
	OK OK x
OK OK x	
OK OK x	

83% 100%

83% 100%

91.6

6/20/17

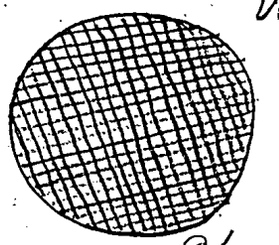
1582-E

OK OK	x	OK OK	x	Drop. Test
OK OK	x	OK OK	x	1. — 11
OK OK	x	OK OK	x	2. — 5
OK OK	x	OK OK	x	3. — 3
OK OK	x	OK OK	x	4. — 3
OK OK	x	OK OK	x	5. — 2
OK OK	x	OK OK	x	6. — 5
OK OK	x	OK OK	x	29 times
OK OK	x	OK OK	x	
		OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
91%		100%		
91%		100%		
		95.8		

1582-E

Rubber pad of packing press sawed with 1/8 saw cuts 1/2" c-c all over at right angles dividing the whole area into small squares - cuts 1/4 deep -

Use directly on the powder - Make 24 blanks - send to miller for test and inspection.



Edging Report

	Edged.	Oks.	Re Edged	Dis.
1st. Cut	363	307	40	16
2nd. Cut	40	26	4	10
3rd. Cut	4	2	0	2
		335		28

Total % 92.2%

77 ± % OK. out of 458 Blanks

(30)

6/20/17.

1583-E

OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x			
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
		OK OK	x	
OK OK	x			
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
		OK OK	x	
OK OK	x			
		OK OK	x	
OK OK	x			
		OK OK	x	
100%		100%		
100%		100%		

Drop Test

1. — 4
2. — 4
3. — 2
4. — 2
5. — 2
6. — 1

15 times

1583-E

With same pad as 1582-E but use felt pad underneath, use the red felt of the original 1560 experiment

Make 24 blanks regular all thru — send to miller for test and inspection.

Edging Report

	Edgld.	OKs.	Re Edgl.	Dis.
1st. Cut	354	253	80	21
2nd Cut.	80.	40	21	19
3rd. Cut.	21	4	0	17
		297		57

Total % 84.7%

82 2/9% OK outs of 469 Boards.

6/20/17

1584-E

				Drop Test
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	1. —— 20
OK OK	x	OK OK	x	2. —— 6
OK OK	x	OK OK	x	3. —— 1
OK OK	x	OK OK	x	4. —— 12
OK OK	x	OK OK	x	5. —— 20
OK OK	x	OK OK	x	6. —— 20
OK OK	x	OK OK	x	79 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
100%		100%		
100%		100%		

1584-E

Same as 1583-E but use white felt of Standard felt Co –

Edging Report.

	Edged.	O.K.	Re Edged.	Rej's
1st Cut	22	6	13	3
2nd Cut	13	3	8	2
3rd Cut	8	4		4
		13		9

Total % 59%

[35]

6/20/17

1585-E

OK	×	OK	×	Drop test
OK	×	OK	×	1 — 5
OK	×	OK	×	2 — 18
OK	×	OK	×	3 — 5
OK	×	OK	×	4 — 20
OK	×	OK	×	5 — 20
OK	×	OK	×	6 — 7
OK	×	OK	×	75 times
OK	×	OK	×	
OK	×	OK	×	
OK	×	OK	×	
OK	×	OK	×	
OK	×	OK	×	
OK	×	OK	×	
OK	×	OK	×	
91%		91%		
91%		91%		
91.5%				

1585-E

Iron plate with grooves 1/4" and 3/8 lands - with coarse wire mesh fastened on press in place of rubber use thin felt - same as 1560-E make 48 blanks - send 24 to Miller

Edging Report.

	Edged	OKs	Re Edged.	Drivenels
1st Cut	19	8	9	2
2nd Cut	9	2	5	2
3rd Cut.	5	2	0	3
		12		7

Total % 63-1/3 %

Refer to 1572 and 1575

6/20/17

1586-E

OK OK	x	OK OK	x
OK OK	x		
OK OK	x		
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x		
OK OK	x	OK OK	
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x		
OK OK	x		

Drop Test

1 — 1
2 — 16
3 — 20
4 — 2
5 — 4
6 — 20
63 times

100% 75%

100% 66%

87.5%

1586-E

Same as 1585-E except use direct on the powder and no felt. Make 48 blanks - send 20 to Miller

Edging Report

	Edged	Oks.	Re Edged	Mis.
1st	20	4	14	2
2nd.	14	5	9	0
3rd.	9	6	0	3
		15		5

Total % 75 %

6/21/17.

1587-E

OK OK x	OK OK x	Drop Test
		1 — 3
OK OK x	OK OK x	2 — 20
OK OK x	OK OK x	3 — 13
OK OK x	OK OK x	4 — 10
	OK OK x	5 — 2
	OK OK x	6 — 1
	OK OK x	49 times
OK OK x	OK OK x	
OK OK x		
OK OK x	OK OK x	
Hole ⊕ 18½		
58%	75%	
58%	75%	
66.6		

1587-E

Same as 1581 except that special moulded pad is used with holes moulded in center — Use red felt of original 1560 Exp., make 24 blanks.

4.

6/21/17

1588-E

OK OK	x	OK OK	x	Drop Tests
OK OK	x	OK OK	x	1. — 3
		OK OK	x	2. — 19
OK OK	x	OK OK	x	3. — 3
OK OK	x	OK OK	x	4. — 1
OK OK	x	OK OK	x	5. — 8
OK OK	x	OK OK	x	6 — 1
				35 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
~~chipped edge~~		OK OK	x	
		OK OK	x	
OK OK	x			
83%		100%		
83%		100%		
91.6%				

1588-E

Same as 1580-E except that special moulded pad with holes moulded in center is used.

Make 24 blanks.

6/21/17

1589-E

OK OK	x	OK OK	x	Drop Test
OK OK	x	OK OK	x	1 — 9
		OK OK	x	2 — 2
OK OK	x	OK OK	x	3 — 11
OK OK	x	OK OK	x	4 — 5
OK OK	x	OK OK	x	5 — 7
OK OK	x	OK OK	x	6 — 6
				30 times
OK OK	x			
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x			
OK OK	x			
100%		83%		
100%		83%		

91.6

1589-E

Same as 1582-E except use special pad with sponge rubber on top & and sponge rubber cut in one inch squares with circular saw. Make 48 blanks.

C45

6/21/17

1590-E

OK OK	x	OK OK	x	Dicfo test
OK OK	x	OK OK	x	1 — 5
OK OK	x	OK OK	x	2 — 20
OK OK	x	OK OK	x	3 — 5
OK OK	x	OK OK	x	4 — 3
OK OK	x	OK OK	x	5 — 2
OK OK Difficult Code		OK OK	x	6 — 2
OK OK	x	OK OK	x	37 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
Code 8 Blk		OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
91%		100%		
83%		100%		
95.8%				

1590-E

Same as 1583-E except use same Rubber pad as 1589 – Make 48 blanks –

1560-E		1560-E		6/20/17	1560-E	1238·E Schedule.
Standard Felt Co.		American Felt Co.		H		
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	—
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	—
OK OK ×	OK OK ×	OK OK ×	OK OK ×		—	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	—
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	OK OK ×
—	OK OK ×	OK OK ×	OK OK ×		OK OK ×	—
OK OK ×	—	—	OK OK ×		OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×		OK OK ×	OK OK ×
91%	91%	91%	100%		91%	66%
91%	91%	91%	100%		91%	66%
91.5		95.8%				

6/21/17

1591-E — 1238-E Schedule

		Drop test	Caliper point
OK OK	OK OK	1 — 2	.213
OK OK	OK OK	2 — 10	.218.1
OK OK	OK OK	3 — 1	.211.1
OK OK		4 — 3	.209
OK OK		5 — 2	.216
OK OK	OK OK	6 — 3	.209
OK OK		21 times	
OK OK			
OK OK	OK OK		
OK OK			
OK OK			
91%	41%		
83%	41%		
66.6%			

Same as 1591-E only use the 1238-E Schedule

Why try? Experiment, experiment

30 8% Knots of 39 Pieces

54% OK out of 700 Pieces

89 ± % OK on blanks.

6/21/17

Edged 17 — 3 | Edging Report 10½ 13 — 2 — 15 | Re Edged 3 | Dis 1

1591-E Total % 88.2%

Same as 1582-E but use rubber pad with saw cuts that start 1¼ inches from edge then ½ inch spacing

Make 48 Blanks.

Send 24 to Millis for inspection & test

1591-E

		Drop Test	Caliper point
OK OK		1. — 5	.214
		2. — 7	.227.1
		3. — 4	.226
OK OK		4. — 1	.210.1
	OK OK	5. — 11	.213
		6. — 3	.213
	OK OK	31	
	OK OK		
	OK OK		
16%	33%		
16%	25%		
	25%		

Must be

Ball up

Get a better system of following through

Three factory

CSJ

6/21/17

1592-E

				Drop Test	Calipers point
OK	x	OK	x	1 — 4	.214
OK	x	OK	x	2 — 1	.218.1
OK	x	OK	x	3 — 1	.222
OK	x	OK	x	4 — 4	.214
OK	x	OK	x	5 — 1	.222
OK	x	OK	x	6 — 20	.215
OK	x	OK	x	3 times	
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x				
OK	x				
100%		100%			
100%		100%			

1592-E

Same as 1591-E except was perforated sheet rubber disc 1/8" thick on top of powder.

Mate 48 Blankers

Send 24 to Miller for inspection & test

Edging Report.

	Edged.	Oks.	Re Edged.	Dis
1st Cut	50	42	5	3
2nd Cut	5	4		1
		46		4

Total % 92%

6/21/17

91.3% OK on Blanks.
94.6% OK. out of 405 Rounds.

6/21/17

70.8% OK out of 4380
90.4% OK on Blanks

6/26/17

78.8% OK out of 1369 Blanks
83.2% OK out of 1757 Rounds 6/28/17

See also after 1602

6/21/17

1593-E — 1238-E Schedules

				Drop test	Calipers points
OK OK	x	OK OK	x	1. — 8	.218.1
OK OK	x	OK OK	x	2. — 1	.211
OK OK	x	OK OK	x	3. — 6	.211
OK OK	x			4. — 18	.209.1
				5. — 20	.212.1
OK OK	x	OK OK		6. — 16	.207
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
91%		91%			
91%		83%			
91.6%					

6 9 times

Same as 1593-E only on the 1238-E Schedule

76 1/2% OK out of 1206 Rec.
86 1/2% OK Blanks.

6/22/17

1593-E

same as 1560 except use Standard Felt Company - white felt -

Send 24 to Muffler

				Drop test	Calipers points
		OK OK	x		
		OK OK	x		
OK OK	x	OK OK	x	1 — 20	.202
OK OK	x	OK OK	x	2 — 3	.209.1
OK OK	x	OK OK	x	3 — 20	.208
OK OK	x	Ash Blk.		4 — 15	.214
OK OK	x			5 — 20	.213
OK OK	x	OK OK	x	6 — 20	.211
OK OK	x			9.8 times	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x				
91%		75%			
91%		76%			
83.3%					

Edging Report.

	Edged.	Ok's.	Re Edged	Dis.
1st Cut	39	34	4	1
2nd Cut	4	2		2
		36		3

Total % 92.3%

84 2/3% out of 46 Records.
78 3/4% OK on Blanks
82 3/4% OK out of 130 Blanks.

CSS.

6/21/17

1594-E

OK OK	x	OK OK	x	Drop test		Calipers point	
				1.	—	20	212.1
				2.	—	1	.194
OK OK	x			3.	—	2	.208
		OK OK	x	4.	—	20	.203
				5.	—	20	.208
OK OK	x			6.	—	20	.215
OK OK	x					8 3 times	
OK OK	x	OK OK	x				
				Edgering Report		80.2% OK	
OK OK	x	OK OK	x				
OK OK	x						
OK OK	x						
66%		33%					
66%		33%					

1594-E

Special moulded rubber pad with 1/8 holes moulded in center over area of a 2 1/2 inch circle, Pad cemented on press in regular way - using device to vent the holes same as 1580-E thru top plate of press -

make 48 blanks -

Send 24 to Miller

6/21/17

1595-E

	OK	×	Drop Test		Caliper Point
OK	×		1.	16	.214.1
			2.	20	.221.1
			3.	20	.226
OK	×		4.	2	.222.1
OK	×		5.	9	.211
OK	×	OK	6.	13	213.1
OK	×	OK		8 of times	
		OK			
OK	×	OK			
OK	×				
OK	×				
OK	×				
OK	×	OK			
75%		50%			
75%		50%			
62.5%					

Edgering Report 79.4%

1595-E

Same as 1594-E except use Standard ~~felt~~ cow felt laid on powder

Make 48 blankets

Send 24 to Miller

6/22/17

1596-E

OK OK	x	OK OK	x	Drop's Test		Balfour Point	
OK OK	x	OK OK	x	1 —	1	.222.1	
OK OK	x	OK OK	x	2 —	2	.213	
OK OK	x	OK OK	x	3 —	3	.203	
OK OK	x	OK OK	x	4 —	1	.207	
		OK OK	x	5 —	2	.212	
OK OK	x	OK OK	x	6 —	2	.215	
OK OK	x	OK OK	x		11 times		
OK OK	x	OK OK	x				
OK OK	x	OK OK	x	Edgeing Report			
OK OK	x	OK OK	x	Total % Ok. 77.2%			
		OK OK	x				
		OK OK	x				
Chipped Edge	x	OK OK	x				
OK OK	x						
53%		100%					
83%		100%					
91.6%							

1596-E

57 lbs wood flour
43 lbs chalk
2 lbs lampblack
12 lbs Rosin
50 lbs alcohol
Make two driers full
Mould (1584-E) rubber pad sawed into 1/2-inch squares to 1 1/4 of edge
press blanks on 1261 schedule
varnish and print regular
Complete report on discards all them
Send 2/ to Miller

85.1% Ok. on Blanks.
91.5% Ok out of 936 Boards

(61)

6/22/17

1597-E 36 blanks in Lot.

OK	x	OK	x	OK	x	Drop test	
OK	x	OK	x	OK	x	1 — 20	
OK	x					2 — 20	
		OK	x	OK	x	3 — 5	
OK	x					4 — 3	
		OK	x	OK	x	5 — 4	
OK	x	OK	x	OK	x	6 — 16	
						68	
OK	x	OK	x	OK	x	6 blanks	
OK	x	OK	x			7 discarded for being broken.	
OK	x	OK	x			Calipers points	
OK	x	OK	x			.215.1	
OK	x	OK	x			.213	
OK	x					.216.1	
OK	x	OK	x			223.1	
OK	x	OK	x			.219	
		OK	x			.214	

80.5

All that were printed were 100% OK defects in blanks

1597-E

Mould with rubber pad sawed into 1/2 inch squares to 1 1/4 inch of edge. Use white felt of standard felt to 1/4 inch thick laid on powder.

Press on 1261 schedule but leave steam on 7 minutes instead of 6 minutes.

Make 48 blanks

Varnish and print regular.

Send to Miller.

Report on Edging

Send 24 to Miller

If use unpeeled blanks prints scores 60

100% — 40% — Blanks were cheap.

89 2/3% OK's out of 26 Records.

	Edging	Report	
	edged.	OK.	Re edge
1st Cut	24	15	6
2nd Cut	6	4	0
		19	

Total 79 1/3%

6/22/17

1598-E

OK	x	OK	x	Drop Test
OK	x	OK	x	1. — 1
				2. — 2
OK	x			3. — 4
		OK	x	4. — 1
		OK	x	5. — 9
OK	x	OK	x	6. — 10
				27 times
OK	x	OK	x	
				Califico Joints
		OK	x	232
		OK	x	222.1
OK	x	OK	x	218.1
OK	x	OK	x	213
OK	x	OK	x	228.1
OK	x	OK	x	223.1

79.1

1598-E

Same as 1597, except kept steam on 8 minutes.

Send 24 to Miller

Edging Report

	Edged	Oks	Re Edged	Nos
1st Cut	32	19	11	2
2nd Cut	11	9		2
		28		4

Total % 87.5%

85% Ok. out of 40 Pieces.

[65]

6/22/17

1599-E Nickel Model Experiment
Every body Love a Jazz Band Nickel Model
5451-C-5-12
90th print) At start fair inwards gets
good. Hs Cracksler lit Music!

60th print start OK. Surface good no cracks.
275 print Very Soft Surface

6/22/17

1600-E Nickel Mold Experiment
Meditation # 3762-B-9-44
3rd print Good Even Surface.
40th print Good Surface no cracks.
246 print Very Soft some flaws and lines

6/22/17

1601-E Nickel Mental Experiment-
American Roots any boy 5414-C388x

20th print big maps near Music-
surface fair, only 1 cracked in Music
considerably in-
75 print Surface Very good.
150 print Soft Surface.
283 print Surface Soft.

1602-E Nickel Molded Experiment.
Everybody loves a Good Bowl.
5437-C-8-1
20 th print Surface Good for Checkers at start
40 th print Surface Good. for circles at start
80 th print Surface Soft.
313 th print Surface Soft.

6/25/17.

1592 E Oil Limits

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
Moratorium Sp		OK OK	X
Moratorium Sp		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
83%	100%	91%	
83%	100%	91%	

91.6%

(75)

6/22/17

1591-E Duplicate

OK OK	x	OK OK	x		Disp test		Caliper points
OK OK	x	OK OK	x	1.	8		.223
OK OK	x	OK OK	x	2.	6		.230
OK OK	x	OK OK	x	3.	3		.223
OK OK	x	OK OK	x	4.	20		.220.1
OK OK	x			5.	20		.213
OK OK	x	OK OK	x	6	20		.220.1
OK OK	x	OK OK	x		77 times		
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
100%		91%					
100%		91%					
95.8							

6/26/17

1603-E

OK OK	x	OK OK	x	Drop Test		Caliper point	
OK OK	x			1.	—	19	.225.1
				2.	—	3	.216.1
OK OK	x	OK OK	x	3.	—	20	214
OK OK	x	OK OK	x	4	—	1	221
		OK OK	x	5.	—	2	210.1
OK OK	x	OK OK	x	6.	—	2.0	220.1
OK OK	x					6.5 times	
OK OK	x						
		OK OK	x	Edgeing Report 84 2/3			
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x						
100%		83%					
100%		83%					
91.6%							

1603-E

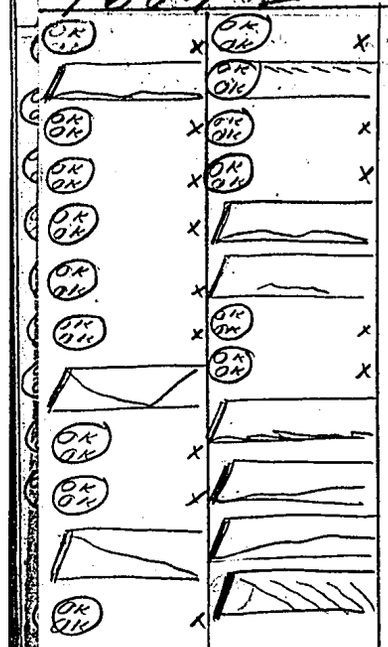
Make about 2,000 lbs powder reg. 1505-E to which is added about 2% cotton floc as it is put in the mill.

Mould with rubber pad sawed into small squares to within 1 1/4 inch of edge - use Standard Felt Co's white felt laid on powder - 1261 schedule on press - varnish and print regular - Send 24 records to Miller.

90 2/3% on blanks
86 2/3% OK out of 1744 Pounds

6/25/17

1604-E



Drop Test	Calipers
1. — 1	.205.1
2. — 1	.203
3. — 2	.209.1
4 — 9	.203.1
5. — 20	.22.0
6. — 2	1931
35 times	

Edging Report 88.5%

75% 50%

75% 41%

62.5

1604-E Moulded rubber pad with ½" rings and cross cuts to vent air — use Standard Felt Co white felt laid on powder —
Make 500 — send 24 to Miller —

92% OK on blanks
73± % OK out of 461 Rounds

CDJ

6/25/17

1605-E

OK OK	OK OK	Drop Test
OK OK		1. — 2
	OK OK	2. — 5
OK OK	OK OK	3. — 5
	OK OK	4. — 8
	OK OK	5. — 9
OK OK	OK OK	6. — 2
OK OK	OK OK	31 turie
OK OK	OK OK	Edgeing report 53.3%
OK OK		
OK OK	OK OK	
OK OK	OK OK	1605-E 1334-E
OK OK	OK OK	78% OK out of 264 Records
OK OK	OK OK	100% on Blanks
OK OK		Edgeing Report. 29.3%
91%	83%	
91%	83%	
87.5		

This is not 1605-E
it is a slight modification
of 1620-E

1605-E

Same pad as 1604-E but
use 1/8" perforated sheet rubber
laid on powder —
Marked 500 send 24
to Miller

Production Report
72.1% OK out of 596 Records.
88.4% OK on Blanks
80.5% OK out of 5130 Records
80% OK on Blanks.
88.2% OK out of 13,855
88.2% OK on Blanks
71.4% OK out of 1004 Records.
92.2% OK on Blanks.
69.1% OK out of 243 Records.
82% OK on Blanks -

6/25/17

1606-E

OK OK	OK OK	Drop Test
OK OK		1. — 5
OK OK	OK OK	2. — 20
		3. — 1
OK OK	OK OK	4. — 1
OK OK	OK OK	5. — 4
		6. 20
OK OK	OK OK	51 times
OK OK	OK OK	
	OK OK	Edgering Report 100% OK
	OK OK	" " 97.2 OK
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	on only 14 records
OK OK		
91%	83%	
75%	83%	
87.5		

1606-E

Same as 1604-E except that pad is used directly on the powder –
Send 24 to mill
Make 84

C05J

6/26/17

1607-E

		Drop Test	Caliper points
OK	OK	1. — 2	.201.1
	OK	2. — 2	.209
	OK	3. — 4	.220
	OK	4. — 20	.204.1
	OK	5. — 8	.230
OK	OK	6. — 13	.230
OK	OK	49	
		Edging Report 93 2/3	
OK			
OK	OK	1607-E-1334-E	
OK		85.1% OK out of 378	
OK	OK	83% OK on Blanks	
58%	66%		
50%	50%		
65.5%			

1607-E
Same as 1605 except that Rubber pad is 5/8 inch thick -
Make 500 Blanks -
Send 24 to Miller -

6/27/17
77.1% OK out of 2,837 Records
92.2% OK on Blanks

6/28/17
76.8% OK out of 448 Records
86% OK on Blanks

84.3% OK out of 3939 Records
92.2% OK on Blanks

84% OK out of 2714 Records
84% OK on Blanks

84.8% OK out of 7331
91.3% OK on Blanks

1607 E.G. A.R.
77% OK out of 3140
82.5% OK on Blanks
74.1% OK out of 1373 Records
95.9% OK on Blanks

6/28/17

1608-E

| | | |

6/28/17

1609-E

OK OK	×	OK OK	×	Drop Test	Caliper points	
OK OK	×	OK OK	×	1. — 2	.213	
OK OK	×	OK OK	×	2. — 20	217.1	
OK OK	×	OK OK	×	3. — 9	.212	
OK OK	×	OK OK	×	4. — 10	.223	
OK OK	×	OK OK	×	5. — 20	.215	
OK OK	×	OK OK	×	6. — 20	.213	
OK OK	×	OK OK	×	81 times		
OK OK	×	OK OK	×			
OK OK	×	OK OK	×	Edging Report 53.1% on 49 records		
OK OK	×	OK OK	×			
OK OK	×	OK OK	×			
OK OK	×	OK OK	×			
OK OK	×					
100%		100%				
100%		100%				
100%						

1609 E

Make 72 blanks using same pad as 1606-E but laid on powder like the thin pad and not cemented to press.
Send 24 to Smith —

90.1% OK out of 54 records
97.9% OK on blanks

6/28/17

1610-E

			Drop Test	Calipers points
OK OK	OK OK	×		
OK OK	OK OK	×	1. — 20	.224
OK OK	OK OK	×	2. — 20	.225
OK OK	OK OK	×	3 — 20	.217.1
OK OK	OK OK	×	4. — 20	.2141
OK OK	OK OK	×	5. — 20	.223
OK OK	OK OK	×	6. — 20	.217
OK OK	OK OK	×	120 times	
OK OK	OK OK	×	1610-E After	
OK OK	OK OK	×	OK OK ×	OK OK ×
OK OK	OK OK	×	OK OK ×	OK OK ×
OK OK	OK OK	×	OK OK ×	OK OK ×
OK OK	OK OK	×	OK OK ×	OK OK ×
			OK OK ×	OK OK ×
100%	100%		OK OK ×	OK OK ×
			OK OK ×	OK OK ×
100%	100%		OK OK ×	OK OK ×
			OK OK ×	OK OK ×
			OK OK ×	OK OK ×
			OK OK ×	OK OK ×
100%			OK OK ×	OK OK ×
			OK OK ×	OK OK ×
			OK OK ×	OK OK ×
			OK OK ×	OK OK ×
			OK OK ×	OK OK ×
			100%	100%
			100%	100%

1610 E

Use 1572-E tool in loading powder from hopper (before) stribing off, press like 1605-E
Make 72 blanks –
Send 24 records to Miller.

Edging Report 52 2/3

Instructions were not followed in this experiment — tool was used after removing from hopper as in the original 1572-E

See record after 1617-E

Done over again June 28-17

Drop Test.
1. — 20
2. — 20
3. — 20
4. — 20
5. — 20
6. — 20
120

Before means after - not before

91 ÷ % Okay of 755 Records.
88 ÷ Okay blanks.

6/29/17

1611-E

				Drop Test	Calipers of ink
OK OK	x				
OK OK	x	OK OK	x	1. —	.220
OK OK	x	OK OK	x	2. —	.223.1
OK OK	x	OK OK	x	3. —	.213.1
OK OK	x	OK OK	x	4. —	.215.1
OK OK	x	OK OK	x	5. —	.212.1
OK OK	x	OK OK	x	6. —	.330.1
OK OK	x	OK OK	x		
OK OK	x	OK OK	x	Edgering Report 81.1%	
OK OK	x	OK OK	x	-1163 Records-	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
100%		91%			
100%		91%			

95.8%

1611-E with W.G. Rosin
Make one drier 1505-E powder
Mould 1605-E —
Send 24 records to Miller.

93.3% [illegible] 1160 [illegible]
90.6% [illegible]

See 1612 letter with E Rosin except blanks

6/28/17

1612-E

				Drop test	Calipers point
OK OK	x	OK OK	x		
OK OK	x	OK OK	x	1. — 1	.218.1
OK OK	x	OK OK	x	2. — 20	.216
Chipped Edge		Signature		3. — 6	.225.1
OK OK	x	OK OK	x	4. — 11	.216
OK OK	x	OK OK	x	5. — 5	.207.1
OK OK	x	OK OK	x	6. — 5	.210.1
OK OK	x	OK OK	x	38 times	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x	Edging Report 88%	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
		OK OK	x		
91%		91%			
91%		91%			
91.6%					

1612-E
Make one drier 1505E Powder with E Rosin mould 1605-E
Send 24 records to Miller.

89.2% Ok and of 68 Records.
70.5% Ok and Clauses.

6/28/17

1613-E

OK	x	OK	x	Drop Test : Caliper Point
OK	x	OK	x	1. — 4 .211.1
OK	x	OK	x	2. — 5 .214.1
OK	x	OK	x	3. — 1 .207
OK	x	OK	x	4. — 4 .207.1
OK	x	OK	x	5. — 11 .206
OK	x	OK	x	6. — 2.0 .208.1
		OK	x	45 times
Machined Center		OK	x	
OK	x	OK	x	
OK	x	OK	x	Edging Report 58%
OK	x	OK	x	Edging Report 81.1/2% Good
OK	x	OK	x	
OK	x			
91%		100%		
91%		100%		
95.8				

1613-E

Duplicate 1513-E
Moulds as 1605-E
Send 24 records to milling -

1613-E 6/30/17

OK	x
OK	x
OK	x
OK	x
OK	x

6/29/17

1614-E

OK OK	x	OK OK	x	Drop Test:		Calipes Point	
OK OK	x	OK OK	x	1. — 3		.234.1	
		OK OK	x	2. — 15		.225	
OK OK	x	OK OK	x	3. — 20		.231.1	
OK OK	x	OK OK	x	4. — 20		.229	
OK OK	x	OK OK	x	5. — 14		.230	
OK OK	x	OK OK	x	6. — 29		.217.1	
				81 times			
OK OK	x	OK OK	x				
OK OK	x	OK OK	x	Edge Report			
OK OK	x	OK OK	x		Reqd	O.K.	Rejd	Dim
OK OK	x	OK OK	x	1st Cut	30	46	33	1
OK OK	x	OK OK	x	2nd Cut	30	12	7	11
OK OK	x	OK OK	x	3rd Cut	7	3		4
						61		16
OK OK	x			Total %		76 2/3 % Good		
OK OK	x							
100 %		100 %						
100 %		100 %						

100%

1614-E
Duplicate 1514-E (1/2 norway wood)
Moulded as 1605-E
Send 24 records to Miller

[14]

6/27/17

1615-E

	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
	OK OK		OK OK
OK OK	Blisters		OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK		OK OK
	OK OK	OK OK	OK OK
		OK OK	OK OK
	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
	OK OK		OK OK
FERNS	OK OK	OK OK	FERNS
OK OK chipped edge		OK OK	OK OK
50%	83%	66%	91%
41%	83%	66%	91%

72.9

1615-E

Mr. Kircher –

Take 48 blanks 1605-E and varnish and bake twice same as 1531-E

Send all 48 to Miller then Send Miller report on edging.

6/28/11

1616-E

OK OK	OK OK	OK OK	Drop Test
OK OK	OK OK	OK OK	1 — 20
OK OK	OK OK	OK OK	2 — 20
OK OK	OK OK	OK OK	3 — 20
	OK OK	OK OK	4 — 20
	OK OK	OK OK	5 — 18
OK OK	OK OK	OK OK	6 — 1
OK OK	OK OK	OK OK	99 times
OK OK	OK OK	OK OK	Caliper points
OK OK	OK OK	OK OK	.208
OK OK	OK OK	OK OK	.216
OK OK	OK OK	OK OK	.223.1
OK OK	OK OK	OK OK	.215
OK OK	OK OK	OK OK	.213
91%	100%	100%	.218
91%	100%	100%	

97.2%

1616-E

Duplicate of 1597 except that perforated thin rubber sheet is used instead of felt.
Make 48
Send all to Miller.
Only received 36 records.

Did you load them like 1610 E with preliminary circular screen pm
It has about same drop test —
NO!!
WHO!

[105]

6/23/17

1617-E

OK OK	x	OK OK	x	Drop Test.		Cubic Points	
OK OK	x	OK OK	x	1.	— 20		209.1
		OK OK	x	2.	— 4		205.1
		OK OK	x	3.	— 20		212
OK OK	x	OK OK	x	4.	— 8		205.1
OK OK	x	OK OK	x	5.	— 10		217.1
OK OK	x	OK OK	x	6.	— 2		207
OK OK	x	OK OK	x		6 4 times		
OK OK	x						
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				

100%

83%

91%

83%

91.6

1617-E

Make 24 records and send to Miller regular 1605 schedule except regular Leave steam on Record Press 14 minutes, Blow steam out after 2 minutes, after 5 more minutes, and again after 5 more minutes.

Inspection Report
82.3% OK out of 85 records
89.2% OK on Blows
89.1% OK out of 775 Records.
95.4% O.K. on Blows

6/29/17

1610-E

Before

Shop Test

1.	20
2.	20
3.	20
4.	20
5.	20
6.	9
	109 times

100%	100%
100%	91%

1610-E carried out correctly — (1e) ~~before & not after~~ - striking off in loading hopper

This was done very differently from what was intended - Instead of using the tool as in 1572 by pressing the tool down several times - it was pressed down firmly only once - Probably the cause of all of the records being wedge shaped. This error was not made in the 1610 where the operation was performed after striking off mould in the hopper -

Dunwoodie -

1610 should be duplicated as it originally was (1e) wrongly tool used after strike off -

E

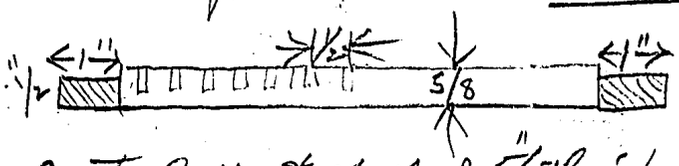
6/29/17

1618-E

8 5/8

8 5/8

1618-E Special Pad 48 Blankets



Central part of pad 5/8" thick
sawed into squares 3/8 deep
saw cuts 1 1/2" C-C and 1/8" wide saw.
Use 1/8 inch thick perforated
sheet rubber pad.
Send all to mills.

CMJ

Drop Test.

1.	.073	20
2.	.061	20
3.	.045	18
4.	.052	20
5.	.073	6
6.	.061	4
7.	.063	20
8.	.059	20
9.	.058	1
10.	.065	20
11.	.055	20
12.	.057	18

187 times

for 6 - average 9 3/4 drops that

1619-E regular 1605-E

Take 12 records discarded for being dished too much — and make form complete drop tests to see if weakness may be caused by the same thing.

Records dished more than .054 are discarded.

Evidently dishing not cause of weakness

~~16195~~

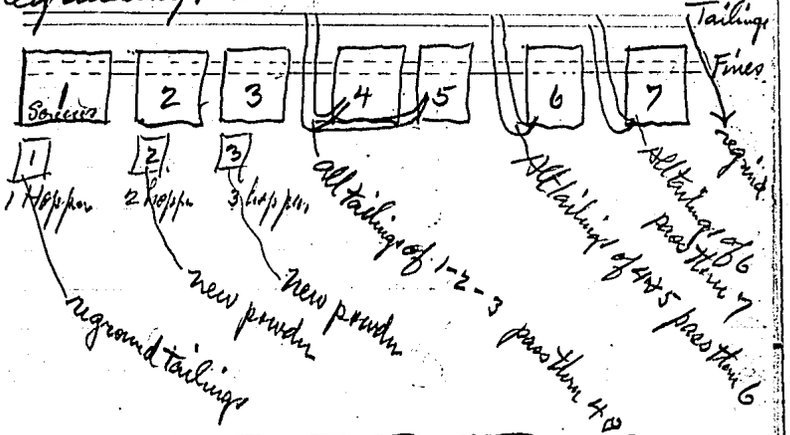
Use 157ZE Tool in loading powder from Hopper, + after

[115]

1620-E 1605-E		1620-E-1610-E	
OK OK	x		
OK OK	x	OK OK	x
OK OK	x		
OK OK	x	OK OK	x
OK OK	x		
OK OK	x		
OK OK	x		
OK OK	x		
66%			
66%		16%	
		16%.	

1620-E

Run screens for 5 hours with reground tailings in no. 1 hopper and regrind all tailings so that no tailings are run thru the screens again without regrinding. —



send 48 to Miller for inspection and drop test; moulded 1605-E

Send 48 to Miller for inspection and drop test moulded 1610E

Send 200 Blanks moulded on 1610 E to Kirchner for special tests to compare surface

7/2/17

1620-E-1605-E

VENEER

Knots (8) Blk

chipped Edg

Drop Test

1. — 20
2. — 8
3. — 7
4. — 20
5. — 20
6. — 75

Edgering Report 89 2/3 %

66%	100%	91%	Inspection Report 82 2/3% Okant of 457
66%	91%	91%	78 2/3 on Planks.

86.1

7/2/17

1620-E-1610-E

Knots (8) Blk

Drop Test

1. — 3
2. — 2
3. — 6
4 — 6
5. — 8
6. — 8

33

Edgering Report 50 2/3 %

50%	50%	58%
50%	50%	58%

1621-E

Drop Test

1 — 20
2 — 4
3 — 18
4 — 20
5 — 20
6 — 10

92 times

7/17

86% Ok out of 738 Records
94 3/5 on Hands

1621-E-B

85 2/5 Ok out of 210 Records
92 2 Ok on Hands

Edging Report
82 2/5

91% 100% Inspection
82 2/5 Ok out of 210 Records
91% 100% 92 2/5 Ok on Hands

75.8

1621-E
Make 5 driers full
Same as 1505-E mixture but 1/2 Norway wood
Dried like 1508-E — short schedule —
Ground and screened like 1620-E
Moulded like 1610-E using wire disc before striking off in hopper.
Press on 1261 Schedule but leave steam on 7 minutes instead of 6 minutes.
Varnish and print regular
Send 48 Records to Mills in Building 7 — also complete report on discards thru the factory.

1621-E-B WRONG WAY WITH TOOL 7/3/17.

Drop Test.

1 — 19
2 — 17
3 — 20
4 — 3
5 — 3
6 — 20

82 times

Edging Report
84 1/5

Crk — Blk

75%
70%

100%
91%

83%
83%

83.6%

C121

7/3/17

1622-E Ok 1615-E Rust

proper way

Drop test

1. — 1
2. — 20
3. — 4
4. — 20
5. — 1
6. — 2

48 times

75%

1622-E

Duplicate of 1610-E

Sent 36 bricks to Miller

(in after striking off)

1610-E-B Done Wrong Way 7/3/17

Drop test

1 — 20
2 — 20
3 — 1
4 — 7
5 — 20
6 — 20

88 times

77.7

7/7/17.

1623-E

OK OK	x	OK OK	x	Rhoto test	Calipers points
OK OK	x	OK OK	x	1 — 1	.221
OK OK	x	OK OK	x	2 — 2	.223.1
OK OK	x	OK OK	x	3 — 2	.224
OK OK	x	OK OK	x	4 — 1	.208.1
OK OK	x	OK OK	x	5 — 4	.226
OK OK	x	OK OK	x	6 — 3	.225.1
OK OK	x			13 times	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x	Edgeing Report	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x	Total % OK. 42 1/2 %	
OK OK	x				
OK OK	x				
100%		91%			
100%		91%			

958

1623-E —
Make 5 drivers full- I Plain
Same mixture as 1505-E. Use 1/2 Norway wood. Dried regular.
Grind and screen like 1620-E
Mould with wire disc operated after strike off by extra man.
Use 1/2 inch rubber pad with concentric ridge in poaching press. Use 1/8 inch perforated sheet rubber.
1261 Schedule ~~[illegible]~~
Varnish and point regular
Send 24 records to Miller.

7/7/17

1624-E

OK OK	x	OK OK	x	
OK OK	x	chipping edge		
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x			

95.8%

Drop Test		Calipico Points
1.	2	.230
2.	6	.223.1
3.	4	.235
4.	3	.221
5.	2	.225.1
6.	3	.225

20 times

Edging Report. 60 6
12 oz Blend

1624-E
Make 5 drivers full.
Same as 1623-E except use
E. Rosin.

7/7/17

1625-E

OK OK	x	OK OK	x
Produce Edge		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
Produce Edge		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x

91.6

Drop Test Caliper points

1. —	2	.233.1
2. —	3	.233.1
3. —	8	.228
4. —	3	.225
5. —	7	.239.1
6. —	1	.225.1

18 times

Edging Report .685%

1625-E
Make 5 drives full
Same as 1623-E except use
W.Co. Rosin.

7/7/17

1626-E

OK	x	OK	x	Drop Test. Calipers
OK	x	OK	x	1. — 3 .203
OK	x	OK	x	2. — 5 .199.1
OK	x	OK	x	3. — 4 .213.1
OK	x	OK	x	4. — 2 .207
OK	x	OK	x	5. — 3 .210
OK	x	OK	x	6. — 1 .203
				18 times
OK	x	OK	x	
OK	x	OK	x	Edgeing Report.
OK	x	OK	x	
OK	x	OK	x	total % OK 37%
OK	x	OK	x	
OK	x			
OK	x			
100%		100%		
91%		100%		
100%				

1626-E
500 (1623-E blanks except hold steam on press 7 min instead of 6 min as in 12 (6) schedule)
O. Send 48 to mill. and full report from factory.

7/7/17.

1627-E

OK OK		OK OK	x	Drop Test		Calipers	Points
			x	1.	3		.209.1
OK OK	x	OK OK	x	2.	1.		.210.1
OK OK	x	OK OK	x	3.	4.		.224.1
OK OK	x	OK OK	x	4.	6		.226
OK OK	x	OK OK	x	5.	1		.225
		OK OK	x	6.	3		.218.
OK OK	x	OK OK	x		18 time		
OK OK	x	OK OK	x				
OK OK	x	OK OK	x	Edgeing Report			
			x	EDGED	OK.	REEDGED	DIS
OK OK	x	OK OK	x	1st	194	56	76	62
OK OK	x	OK OK	x	2nd	76	17	21	38.
OK OK	x			3rd	21	3		18
OK OK	x					76		118
OK OK	x				Total % 39 2			

100%

Inspection Report
77 2% OK out of 234 Rounds
57% OK on Blanks

1627-E same as 1626-E except use 1624 blanks —
24 Rounds delivered to Smiley

7/7/17

1628-E

OK	x	OK	x	Drop Test	Calipoints	
OK	x	OK	x	1. — 1	233.1	
OK	x	OK	x	2. — 3	.224	
				3. — 4	.235.1	
OK	x	OK	x	4. — 2	.231.1	
OK	x	OK	x	5. — 2	.218	
OK	x	OK	x	6. — 2	.221.1	
OK	x	OK	x	14 times		
OK	x	OK	x			
OK	x	~~Chipped~~		Inspection Report.		
OK	x	OK	x	73% OK out of 326 Rounds		
OK	x	~~Chipped~~		82+% OK on Blanks		
OK	x	OK	x			

91.6

1628-E same as 1626-E except use 1625 Blanks.

24 Rounds delivered to Smillie

7/5/17

1630-E-1610-E

	OK
	OK
OK	OK
OK	OK
OK	OK
OK	OK
	OK
OK	OK
OK	OK
	OK
OK	OK
	OK
OK	OK

70.8%

Drop Test

1. — 20
2. — 4
3 — 10
4 — 12
5 — 17
6. — 11

64 times

7/5/17

1630-E-1605-E

OK	OK
OK	Tank Dbl
OK	OK
OK	OK
OK	OK
OK	OK
OK	OK
OK	OK
OK	OK
OK	
OK	OK
OK	
OK	OK
OK	OK
OK	OK
OK	OK

91.5

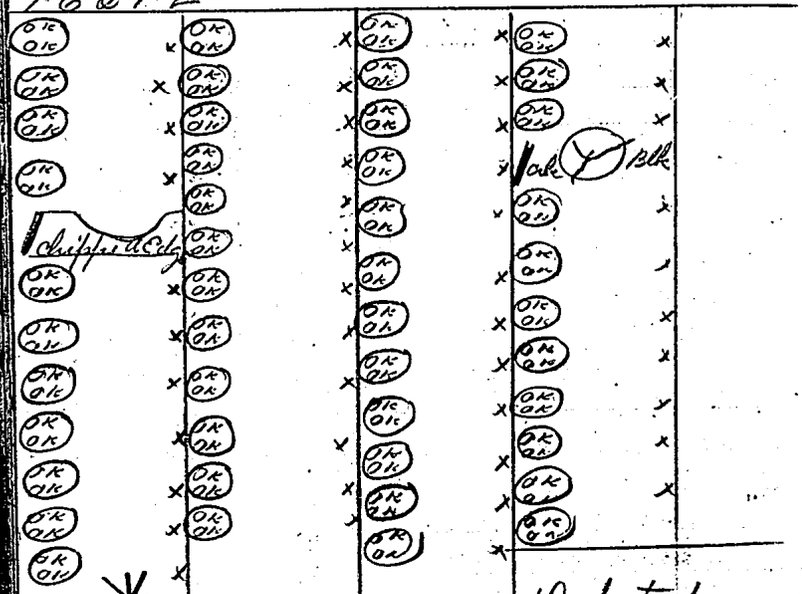
Drop Test

1. — 20
2. — 20
3. — 18
4. — 7
5 — 20
6. — 10

95 times

7/7/17

1629-E



95.88

Edging Report

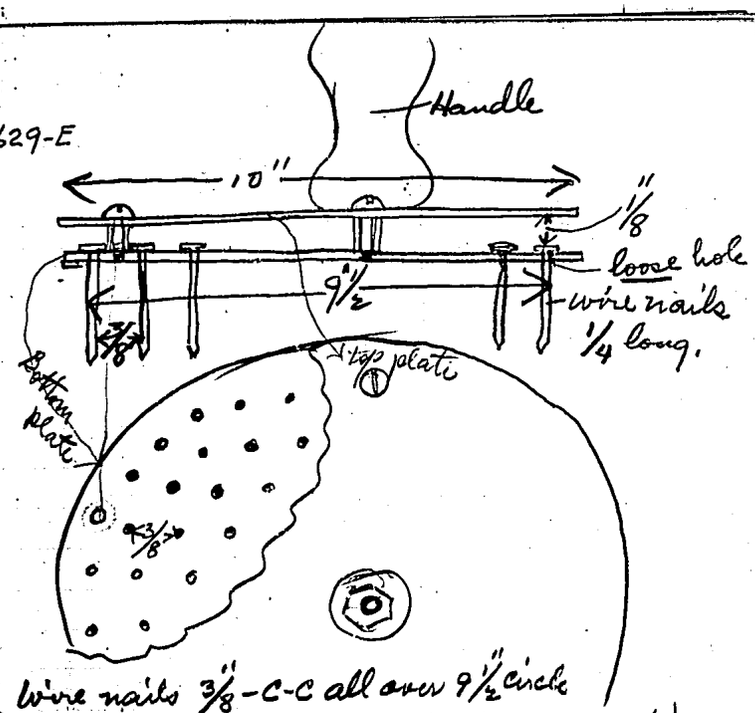
total % 7 4/9

Inspection Report
93 % Ok out of 74 Records
85 % Ok on Blanks.

Drop test
1 — 1
2 — 8
3 — 7
4 — 11
5 — 2
6 — 4
33 times

Caliper points	
.229	.234
.229.1	.225.1
227.1	.217.1

1629-E



Wire nails 3/8"-C-C all over 9 1/2" circle

Use same as 1572 tool in packing the powder in place of the wire mesh

Make 100 blanks using this tool after strike off in loading hopper

~~Send to~~ varnish & paint regular send 48 to mill.

If the trouble is electrostatic this tool should work better than wire mesh.

7/7/17

1630-E

OK OK	OK OK	OK OK VENEER	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	MOISTURE Spot
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
	OK OK	OK OK	OK OK
	OK OK	OK OK	OK OK
	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK

937

Edging Report

Total % OK. 58 3/8

Drop Test	
1. —	20
2. —	20
3. —	3
4. —	20
5. —	1
6. —	20
	8 4 trim

1630-E

Mr Kridler —

Get a quart of varnish from Hoffman - without any filler and varnish the edges and center of about 200 blanks immediately before the regular coat of varnish is applied. Send 4 rounds to Miller for inspection and drop test.

Have careful record of edge inspection and center hole chips to be entered in Mr E's Book.

C141J

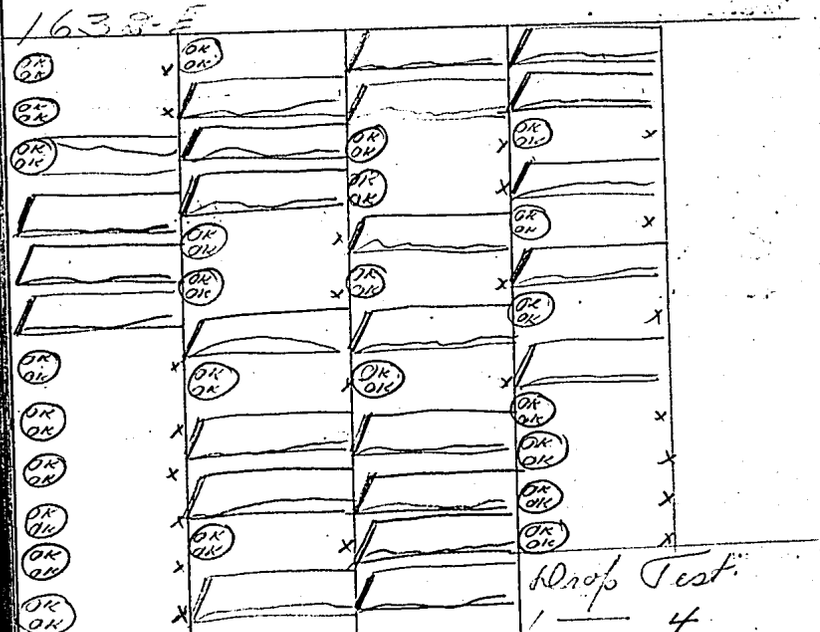
7/7/17

1631-E

OK	OK	OK	OK
	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK

7/15/17

1638-E



52%

Drop Test

1	4
2	4
3	4
4	3
5	1
6	3
	19 times

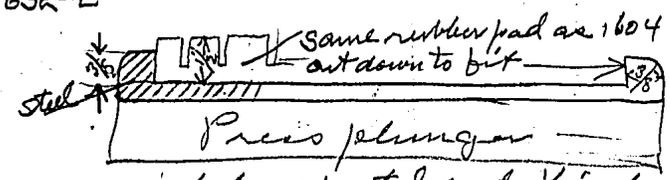
Edging Report

	Edged	OK.	Reedged	Dis.
1st Cut	79	53	24	2
2nd "	24	13	9	2
3rd "	9	5		4
		71		8

90%

Calipers	Points
.233.1	.224.1
.214	.213
.204.1	.200

1632-E



use moulded perforated pad. 1/8 inch
Make 200 blanks with same powder as 1620-E – varnish and print regular
Send 48 records to Miller
Report on edge inspection as soon as possible.

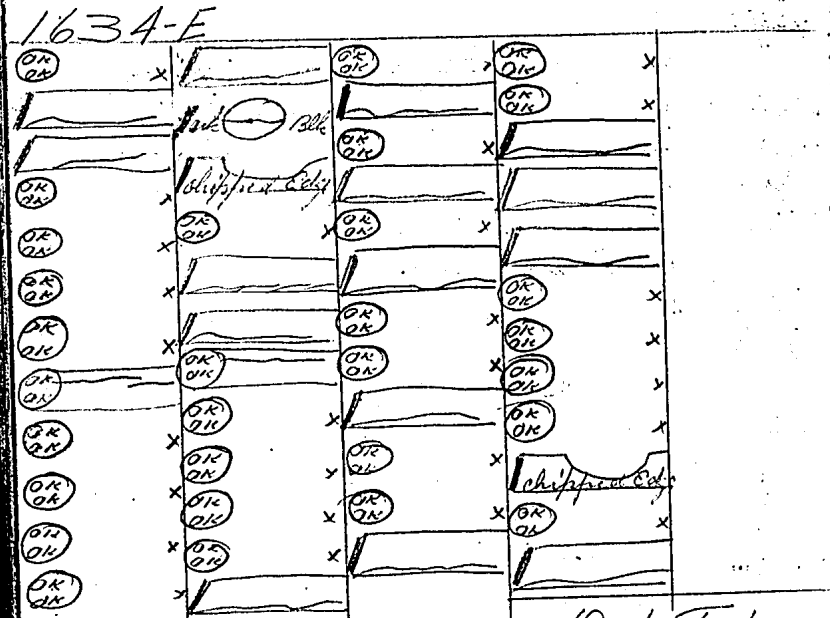
7/11/17

1633-E

| | | |

7/12/17

1634-E



62.5

Drop Test

1. — 5
2. — 3
3. — 1
4. — 4
5. — 1
6. — 1

15 times

Calipers	Points
205.2	220
210.1	222
211.1	226

1634-E

Same as 1632-E except that the steel ring is turned out 1/8 inch more and rubber is 1/4 inch larger in diameter. ring is 1/4 inch wide instead of 3/8-inch wide.

Make 200 blanks

Send 48 records to Miller.

Report on edge inspection as soon as possible.

Edgewing Report. 87 [illegible]

7/12/17

1635-E

43.7%

Hoop Test

1. — 5
2. — 3/8
3. — 8
4. — 1
5. — 4
6. — 11

30 times

Calipers	Point
.221.1	.228.1
.212	.220
.221.1	.230.1

1635-E

Same as 1635-E except that ring is turned out 1 in. larger in diam. leaving it only 1/16 in. wide also 32 holes are drilled in the ring opposite the slots holding rubber. Holes are 3/16 in. in diam. and are 1/8 in. from the top edge of the ring.

Edgewood Point .793"
" " .625"

1636-E

Blank mould ring with 1/16 radius fillet to prevent flange from breaking off.

Special round edge bottom plate to fit. Put in service July 12-17

August 10 found to be O.K.

Started to make this standard

1637-E

OK OK	X	OK OK	X	OK OK	X	
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			

Inspected by Haviland

drop test	
1	20
2	9
3	9
4	20
5	20
6	20
	98

Caliper

low	high
236	240
236	248
232	238
242	247
237	244
234	254

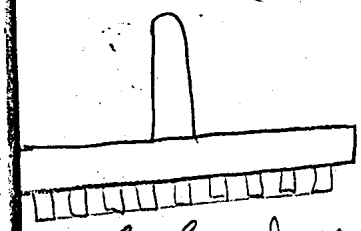
Edging Report.

Edged	O.K.	Edged Div.	
9	13	5	1
5	2	3	
3	2		1
	17		2

90% OK

1637-E

Wood disc 10 1/4 diameter with 1/2 inch soft rubber tubes 5/16 inside diam, projecting from face all over 9 3/4 inch circular area, (139 tubes)



After striking off mould in hopper this tool is vibrated up and down 60 times while rotating by hand over the mould.

Press on 1261 schedule, varnish and print regular; send all to mills — 25 made —

inspection — drop test — edging — centers seem a little soft.

all too thick —

Edging Report 56 5/8 ?

7/13/17

#1

1605-E

95.8%

The above two loads were taken from the unit entirely without notice.

1637-E

95.8% Perfect.

100 %

The above two loads were made from the same unit. The two previous were taken as a check.

7/14/17.

1638-E

FERNS

Drop Test

1. — 1
2. — 20
3. — 2
4. — 6
5. — 2
6. — 14

45 times

Coloring Report:

Edged	OK.	Welded	Mis
47.	19	21.	7
21	10	11	
11	3		8
	32		

1638-E

Make 48 blanks regular 1261 schedule except 750 pounds pressure. Varnish and print regular —

7/14/

1639-E

OK		
OK	OK	
FERNS	OK	
FERNS		
OK		
OK		
OK	OK Lay-2-3	
OK	OK	
OK		
OK	FERNS	
OK	FERNS	
	FERNS	
	FERNS	
	FERNS	
	OK	

54.3

Drop Test

1. — 20
2. — 1
3. — 1
4. — 20
5. — 1
6. — 4

47 turns

Calipers points

.233-1 .218
.224 .224.1
224.1

Edging Report

	Edged	Pts.	ReEdged	
1st Cut	18	10	7	1
2	7	5	2	
3.	2	2		
		17		1

1639-E

Make 24 blanks regular 1261 schedule except 750 pounds pressure and keep steam on 7 minutes. Varnish and print regular.

C16C

7/14/11

1640-E

OK OK	x	FERNS
OK OK	x	OK OK x
OK OK Lace 18		OK OK x
OK OK	x	OK OK x
FERNS		FERNS
FERNS		FERNS
OK OK	x	FERNS
OK OK		OK OK x
FERNS		OK OK x
OK OK	x	OK OK x
FERNS		FERNS
OK OK	x	

Drop test

1. — 20 times
2. — 2
3. — 17
4. — 20
5. — 3
6. — 1

63 times

Calipers Points

.223.1	.217
.228	.216
.222	.220

Edging Report

	Edged	Off.	Cut Edge	Dis
1 Cut	6	12	3	1
2 "		-	2	1
		12		2
				4

62.5

75% Edged.

1640-E

Make 24 blanks regular 1261 schedule except 750 lbs pressure and keep steam on for 8 minutes.
Varnish and print regular

7/15/17

1641-E

FERNS

FERNS

OK OK Sour 1

FERNS

FERNS

FERNS

FERNS

FERNS

OK OK

OK OK

FERNS

OK OK

28.5%

10 Planks marked after commencing found OK.

Drop test

1. —
2. —
3. —
4. —
5. —
6. —

California

Edging Report.

78.6% OK.

	Edged	Ok.	Re Edged	Dis
1st Cut	14	11	2	1
2nd		2	1	1
3rd			1	1

1641-E

Matri 24 planks regular 12 by schedule except 850 lbs. pressure
varnish and print - regular

L160

7/14/17

1642-E

OK OK	x	OK OK	x	Drop Test.
OK OK	x	OK OK	x	1. — 2
OK OK	x	OK OK	x	2. — 2
OK OK	x	OK OK	x	3. — 3
OK OK	x	OK OK	x	4. — 8
OK OK	x	OK OK	x	5. — 3
OK OK	x	OK OK	x	6. — 5
				23 times
OK OK	x	OK OK	x	Bailing Pins
OK OK	x	OK OK	x	.220.1
OK OK	x	OK OK	x	.219
OK OK	x	OK OK	x	.221
				.215
OK OK	x	OK OK	x	.223
				.234

100

1642-E
Make 24 blanks regular except ~~pass~~ on old schedule 1238 —

7/14/17

1643-E

OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x	OK	x	
OK	x			
OK	x			

100%

Drop test

1. — 2
2. — 10
3. — 3
4. — 1
5. — 20
6. — 5

48 turns

Calibres Points

.225	218
.219	2201
.221	.336.1

Edgeing Report

	Edged	Ok.	Re Edged	Disc
1st Cut	43	35	17	1
2 Cut	17	9	7	1
3 Cut	7	4		3
		38		4

88.3% Ok.

1643-E Made 24 blanks regular 1261 schedule except prep steam on for 8 minutes.

7/15/17

1644-E

OK OK x	OK OK x
FERNS	FERNS
FERNS	OK OK x
	OK OK x
FERNS	OK OK Not - 3
OK OK x	OK OK x
FERNS	FERNS
OK OK x	
OK OK x	FERNS
OK OK x	FERNS
FERNS	
FERNS	

47.6%

3 Hawks Grade rights commencing planed order.

Edging Report

90.5% OK.

	Edged	OK.	Re Edge	No.
1st Cut	21	14	5	2
2nd		5	5	
3rd				

1644-E

Make 24 blanks regular 1261 schedule except 700 lbs pressure varnish impregnant regular -

C17U

7/15/15

1645-E

OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x				
OK	x	OK	x		
OK Low-3		OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x				
OK	x				
OK	x				

Drop test		Calipers per
1 —	7	.221.1
2 —	3	.227.1
3 —	10	.213
4 —	20	.225
5 —	1	.228.1
6 —	7	.221

48 times

Edging Report

80% OK

	Edged	OK	Re Edged	Disc
1st Cut	20	15	3	2
2nd Cut	3	1	2	
3rd Cut	2			2

90%

4 blanks Machine after consecutive from Cutter

1645-E

Make 24 blanks regular 1261 schedule except 700 lb pressure and steam on for 7 minutes —

1646-E

Make two blanks regular schedule out of powder that has been run thru tumbler rolls (ordinary clothes ringer)

2 Records OK for angles. Surfaces good one has a very bad Ryan Cut and could not see it.

Drop Test - 20-20

C(15)

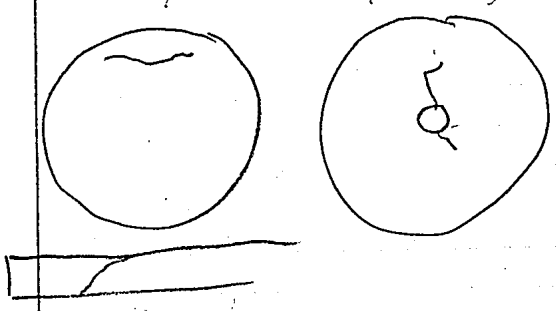
1647-E

Make two blanks out of regular soft blanks that have been ground up to fairly coarse powder — say 20 mesh.

7/14/17

1648-E		Drop test	Calipers point
OK 0K	x	1. — 20	.239.1
OK 0K	x	2. — 20	.225
OK 0K	x	3. — 20	233
OK 0K	x	4. — 20	.235.1
OK 0K	x	5. — 20	.219.1
OK 0K	x	6. — 20	.235
		120	
OK 0K	x		
OK 0K	x		
OK 0K	x		

3 Hawks cracked after coming out of oven.



Crushed, showing complete -

1648-E Duplicate of 1646-E

Only wished of making 2

Hawks will make 13

1649-E

C&O

7/15/17.

1650-E

OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK differences
OK OK ×
OK OK ×
OK OK ×

100% in printing

(3 blanks Recorded) 1 for cracked crown blank
1 for marked cutter

Drop test		Calipers Point
1. —	10	.227
2. —	20	.210.1
3. —	3	.222.1
4. —	1	.221
5. —	20	.217.1
6. —	6	.224

60 times

Edgering Report.

Edged OK	Re Edged	Rec
9	4	5
5	2	3
3		3
	6	

66.6% OK

1650-E

Powder 135° F – 12 blanks –
This is regulated powder also
run the regulated wave.

8/16/47

1651-E

		Drop Test		Calipers Point
OK OK	x	1. —	14	.226
OK OK	x	2. —	15	.217.1
OK OK	x	3. —	20	.222.
OK OK	x	4. —	7	228.1
OK OK	x	5. —	1	.224.1
OK OK	x	6. —	7	.223
			64 lines	
OK OK	x			
OK OK	x			
OK OK	x			
OK OK	x			

83%

Edging Report

Edged	OK.	Re Edged	Mins
10	6	3	1
3	1	1	1
1	1		2
	8		

80% OK.

1651 Powder cold
12 blanks 50%

Stamps [illegible]
1650-E
Run the regular way.

7/15/47

1652-E

OK	x	OK	x	Drop Test		Calipers	Points
OK	x	OK	x	1.	—	20	.234.1
OK	x	OK	x	2.	—	20	.237.1
OK	x	OK	x	3.	—	15	.233.1
OK	x	OK		4.	—	16	.227.1
OK	x			5.	—	20	.243.1
OK	x			6.	—	20	.236.1
OK	x					111 turns	
OK	x						
OK	x						
OK	x						
OK	x						
OK	x						
OK	x						

100%

no fractures

7 Handles Dies applied correctly from cores.

Edging Report

60% OK

Edged	OK	Re Edge	Dis
15	8	5	2
5	1	3	1
3			3

1652-E

(123)

Make 24 blanks on old schedule except pressure 500 lbs instead of 600 lbs on blank press

7/15/17

1653-E

OK OK	x	OK OK	x	Drop test		Calipers	
OK OK	x	OK OK	x	1. —	12	.237.1	
OK OK	x	OK OK	x	2. —	20	.244	
OK OK	x			3. —	3	.241.1	
OK OK	x	OK OK	x	4. —	20	.235.1	
OK OK	x			5. —	20	.253.1	
OK OK	x			6. —	20	.246.1	
OK OK	x				95 turns		
OK OK	x						
OK OK	x						
OK OK	x						
OK OK	x						
OK OK	x						
OK OK	x						

Edging Report

36.3% OK.

	Edged	OK.	REdged	Disc
1st Cut	11	2	9	
2 "	9	1	8	
3.	8	1		7.

100% inspecting

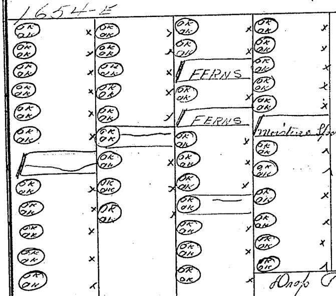
7 blanks crackled after coming from oven

1653-E

Make 24 blanks on 1261 schedule: except assume 500 lbs instead of 600 lbs on blank press.

7/15/17.

1654-E



90.9

Drop Test

1. — 20
2. — 20
3. — 8
4. — 20
5. — 10
6. — 20

98 times

Caliper Point

.228	.224
.234.1	.222
.235.1	.222

- 1654-E

Marked 1605-1508 -

This is more like 1620-E tho all of the tailings are not ground. Tailings are ground when percent of fine passing thru 150 mesh screen is as low as 50% with 1605 - this was about 20% when tailings were reground. This is dried like 1508 -

7/15/17

1655-E

| | | |

7/15/17

1656-E

OK OK x	FERNS	Drop Test
FERNS	FERNS	1. — 11
OK OK x	OK OK x	2. — 20
OK OK Lot-1	FERNS	3. — 20
FERNS	FERNS	4. — 20
OK OK x	FERNS	5. — 20
		6. — 20
FERNS	FERNS	111
OK OK x	OK OK Lot-2	
OK OK x	OK OK x	Edgeing Report
OK OK x	OK OK x	Edgd. OK. ReEdgd Disc
OK OK x	OK OK x	23 18 5
OK OK x	FERNS	5 4 1
		1 — 1
		13
		96% OK.

5-8.3

1656-E

Repeat 1639-E except in printing keep steam on 5 minutes longer and blow out press one extra time.

(1) One theory is that finer grinding makes more surface and consequently requires more rosin to stick the particles together. Reasoning on this we would expect to find that a larger proportion of chalk relative to wood flour would require more rosin.

The above does not consider the thickness of the coat of rosin on the particles. We know nothing whatever about this factor.

(2) Another theory is that the chalk is used to fill the spaces between the larger particles of wood and that the rosin is to fill the remaining spaces. If this is the true principle the grading of the particles is the most important factor.

(3) The hydrostatic pressure probably affects the fluid rosin thru surface tension before all of the spaces are filled. Some condition of the powder affecting this surface tension may be the governing factor.

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 23
Notebook, N-17-07-15

This notebook was used by William W. Dinwiddie, Archie D. Hoffman, and possibly other experimenters during July-August 1917 for notes on efforts to improve Edison disc records. There are occasional comments by Edison on the work performed. The entries pertain primarily to a sequence of experiments numbered from 1657E through 1749E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients. The entries generally consist of instructions by Dinwiddie or Hoffman describing the experimental records wanted, accompanied by evaluations of the test records based on their durability, thickness, and edging. One entry toward the end of the book gives a "Schedule of Operations" involved in pressing records. The front is labeled "Disc Record" and "23"; the back cover is labeled "23." The pages are unnumbered. Approximately 200 pages have been used.

O'Connor. fireman.
Connolly. fireman.

73498
Acme Co.,
MFG. STATIONERS,
15 JOHN ST.
AND
10 PLATT ST.
NEW YORK.

1657-E

65 lbs wood -
35 lbs chalk -
12 lbs Rosin - I grade
50 lbs Alcohol -
Make one drier full -
Test for surface all samples made from this powder -
Powder to be dried regular and screened regular - (1654-E) (tailings reground when they reach 50% fine)

Surface of Records printed on same nickel moulds - are scarcely any louder than regular - but seem to be a little louder, ~~[illegible]~~

7/15/17

1658-E

			Drop Test	Calipso Point
	OK	x		
OK		x	1. — 2.0	.235.1
	OK	x	2. — 2.0	232.1
OK		x	3. — 2.0	.237
	OK	x	4. — 3	.229.1
OK		x	5. — 2.0	.243
OK		x	6. — 2.0	.236
OK		x	103 lines	
OK		x		
OK		x		
OK		x		
OK		x		
OK		x		
OK		x		
OK		x		
OK		x		
OK		x		

Blanks Wrapped in Cellophane or Other

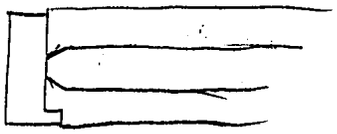
77.7%

Edging Report

All Edges 100%

on first Cut.

1658-E



Special blank mould to bevel edge of blank —
Make 48 Records send to Miller — Also report on edging.
Should harden ~~edge~~ edge slightly.

Only made 19 blanks.

Only saw 1 blank
1 Edge had a groove in it
other Edge perfect.

Varnish stucate wood.

7/15/

1659-E

OK	x	OK	x	Drop Test	Calipers	Point	
OK	x	OK	x	1. —	1	.227.1	
OK	x	OK	x	2. —	5	.224.1	
OK	x	OK	x	3. —	20	.224	
OK	x	OK	x	4. —	19	.222	
		OK	x	5. —	20	.223	
OK	x			6. —	15	.227.1	
OK	x	OK	x		8 times		
OK	x	OK	x				
OK	x	OK	x	Edging Report.			
				Edged	Re Edged	Ok	Alt
OK	x	OK	x	23	4	19	
OK	x	OK	x	4	1	3	
OK	x	OK	x	1		1	
				100%			

100%

Edged	Ok	Re Edged	Alt
56	40	13	3
13	10	3	
3	2		1
	52		4

93% Ok

1659-E

Make 100 blanks 1261 schedule from 1657-E ~~[illegible]~~ powder - varnish and print regular. Send 24 to Miller. Report on edging of all.

→ Eye Inspected
91.3% Ok out of 23 Records.
96.5% Ok out of 55 Records

7/15/12

1660-E

OK OK	x	OK OK	x	Drop Test		Caliper Point
OK OK	x	OK OK	x	1. —	20	.225
OK OK	x	OK OK	x	2. —	6	.221
OK OK	x	OK OK	x	3. —	2	.224.1
OK OK	x	OK OK	x	4. —	6	.223.1
OK OK	x	OK OK	x	5. —	20	.216.1
OK OK	x	Nail (1) Blk		6. —	3	.226.1
OK OK	x	OK OK	x		57 times	
OK OK	x	OK OK	x	Edging Report.		
OK OK	x	OK OK	x	Edged	OK.	Re Edged	Rej.
OK OK	x	OK OK	x	85	64	16	5
OK OK	x	OK OK	x	16	9	5	2
OK OK	x	OK OK	x	5	5		7
					78		
					91.7% OK.		
Bad Saw Cut							

Eye Inspected
76.4% OK out of 17 Recalls
86.1% OK out of 72 Rounds

91.6%

1660-E

old schedule ?

Make 100 blanks, (1054) Schedule (1235 blanks schedule) from 1657-E powder Varnish and print regular – Sand 24 to Mill. Report on edging of all,

7/16/

1661-E

OK OK	x	OK OK	x	
OK OK	x			
		Chipped Edge		
OK OK	x	Chipped Edge		
OK OK	x			
OK OK	x			
		OK OK	x	
OK OK	x	OK OK		
		OK OK	x	

Drop test

1 —	4	.221
2. —	4	.210.1
3. —	2	.219
4. —	4	.227
5. —	1	.213
6. —	1	.224.1

16 times

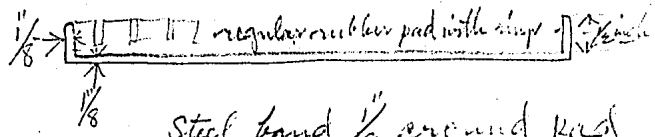
Coloring Robert.

Edged	OK.	Re Edged	Disc
32	20	8	4
8	6	2	
2	2		
	28		4

84.8 % OK

43. %

1661-E



Steel band 1/8 around pad to make edges a little harder, band is same height as pad.

Make 100 blanks regular powder.

Send 24 to Miller.

7/16/17

1662-E

	OK	x			
OK	x	OK	x		
OK	Rippled Ed				
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x				
OK	x				

Drop test Caliper points

1.	5	.215.1
2.	3	.214.1
3.	4	.224.1
4.	1	.218
5.	7	.219
6.	1	.217

21 turns

Edging Report

Edged	OK.	ReEdge	Disc.
40	26	11	3
11	5	5	1
5	5		4
	36		

63.6

90% OK

1662-E

Same as 1661-E except use 1657 powder.

7/18/17

1663-E

OK OK	x	OK OK	x		
OK OK	x	OK OK			
OK OK	x	OK OK			
OK OK	x				
OK OK	x				
		OK OK	x		
		OK OK			
OK OK	x				
		OK OK			
OK OK	x				

54.1

Drop test Calipes Points

1.	—	2	.219.1
2.	—	5	.232.1
3.	—	5	.225
4.	—	11	.236
5.	—	2	.232
6.	—	3	.221

28 times

Edgeing Report

Edged	OK	Re Edged	Disc
11	9	2	
2	2		
	11		

100% OK.

Edged	OK.	Re Edged	Disc.
35	21	12	2
12	9	2	1
2	1		1
	31		4

88.5% OK.

1663-E

Same as 1661 except
our 1261 schedule hold. steam 7 minutes

7/16/17.

1664-E

OK	x			Drop test Gauge Points		
OK	x	OK	x	1.	1	224.1
OK	x	OK		2.	2	.220
OK	x	OK		3.	3	.221.1
OK	x	OK		4.	4	.218
OK		OK	x	5.	6	.229
OK	x	OK	x	6.	6	.221.1
OK		OK	x		22 times	
OK		OK	x			
OK	x	OK			Edging Report	
		OK	x	Edged OK	Edged Rec	
				35	26	9
OK	x			9	6	3
OK	x			3	3	
OK	x				35	
					100% OK.	

90.4%

Eye Inspected
42.6% OK out of 52 Recd

1664-E
Make 100 blanks with 1657 powder but hold steam on 7 minutes.
Send 24 records to Mills.

1665-E

OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x

63.6%

Drop test Caliper pow.

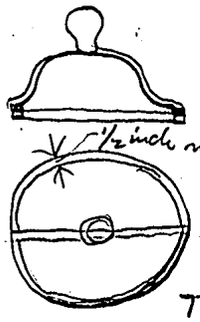
1. —
2. —
3. —
4. —
5. —
6. —

Edging Report.

Edged	OK.	Re Edged	Disc.
7	4	3	
3	1	2	
2	1		1
	6		1

85.7% OK.

1665-E



Make 12 blanks press this ring down in loading hopper then put more powder in and strike off again.

This was pressed down 5 times on each blank to pack the powder on the edges. —

7/19/17

1666-E

OK	x	OK	x	Drop Test Caliper Position			
OK	x	OK	x	1.	—	10	.226.1
		OK	x	2.	—	20	.214
OK	x	OK	x	3.	—	20	.214.1
OK	x	OK	x	4.	—	4	.236
OK	x	OK	x	5.	—	10	.224.1
OK	x	OK	x	6.	—	1	.212
OK	x	OK	x	78 times			
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x	Inspection Report			
OK	x	OK	x	Inspected 3,912			
OK	x	OK	x	and of these 3,124 were			
OK	x	OK	x	OK			
OK	x	OK	x	81.2% OK			
OK	x						

100%

1666-E

60 lbs wood
40 lbs chalk
12 lbs Rosin I grade
50 lbs alcohol (2 lbs gas black)

Make two driers full—
Mould varnish and print regular— save powder enough for 500 blanks for experiments

Mr. Edison listened to six prints made on nickel moulds in comparison with six prints made on the same moulds with regular powder and could not detect any difference in surface.—

Edison Report.

Edged	OK.	Disc
771	739	32

95.8% OK.

7/15/

1667-E

OK	x	OK	x		Drop Test	Calipers Points	
OK	x	OK	x		1. — 1	.218.1	
OK	x	OK	x		2. — 10	.208	
OK	x	OK	x		3. — 3	.218	
OK	x	OK	x		4. — 20	.220	
OK	x	OK	x		5. — 5	.212.1	
OK	x	OK	x		6. — 14	.221	
OK	x	OK	x		53		
OK	x	OK	x				
OK	x	OK	x				
OK	x						
OK	x						
OK	x						

100%

no printing

3 Hands made all the printing forms & tied

Edging Report

Edgd.	OK.	REdgd	Disc
45.	25	13	7
13	8	4	1
4	4		
	37		8

82.2% OK.

Eye Inspection
84.9% OK out of 53 Runs

1667-E
Make 100 blanks with only 500 pounds pressure on the rubber press - regular in every other way - They will be thinner
Send 24 to Miller

[21]

7/17/17

1668-E

	Drop Test	Calipus Point
1.	16	.2251
x 2.	9	.209
3.	1	.223
4.	14	.226
5.	6	.2271
6.	9	.222
	55 times	

Edging Report

	Edged	OK.	Re Edged	Disc
	49	30	19	
x	19	6	10	3
y	10	7		3
		43		6

87 7% OK.

29.1%

1668-E

Make 100 blanks like 1661 but leave out the thin rubber pad.

Send 24 to Miller —

Report on inspection and edging of all

7/17/17

1669-E

1	OK	x	Drop test	Calipso Points
OK	x	x	1. — 20	.243.1
OK	x	x	2. — 11	.227.1
OK	x	x	3. — 3	.248.1.
OK	x		4. — 1	.223.1
OK	x		5. — 20	.235.1
OK	x		6. — 5	.241
OK	x		60 times	
OK	x			
OK	x			
OK	x			
OK	x			
OK	x			
OK	x			

93.7 % on punching

8 Blanks marked with connecting [illegible]

Edging Report.

Edged	O.K.	Re Edged	Disc
54	19	31	4
33	4	18	9
11	6		12
	29		25

53.7% OK.

1669-E

Make 100 blanks — after loading press 5 times with 1572 tool, then leave out the thin rubber pad.

send 24 to Miller

Report on inspection and edging of all

7/17/17

1670-E

Drop	Col	Calif. bonds
1.	20	.223
2.	20	.248.1
3.	1	.228
4.	1	.233
5.	4	.220.1
6.	10	.215.1
	56 lines	

Edging Report

Edged	OK'd	Re Edged	Dis
33	18	15	
15	7	7	1
7	3		4
	38		5

84.8% OK

Shade [illegible] from [illegible]

[illegible] on [illegible]

1670-E

Same as 1669-E except use the 1661 pad—

Send 24 to Trilla.

Report on inspection and aging of all

7/17/15

1671-E

OK OK	
FERNS	FERNS
OK OK	OK OK
OK OK	
FERNS	
OK OK	

29 4% no printing

7 Heavens, Gradise, Bar Necessity, Hand Dance

Prof. Test	Calipic Points
1. 30	.230
2. 1	.222
3. 3	.215.1
4. 6	.212
5. 10	.255
6. 8	.224
48 turns	

Edging Report.

Edged	OK	Re Edged	Disc
22	14	6	2
6	6	4	
4	2		2
	18		4

81.8% OK.

1671-E

Same as 1668-E except used 500 pounds pressure on packing press. Send 24 to Mills

Report on inspection and edging of dies.

7/17/15

1672-E

OK OK	x	OK OK	x		
		OK OK	x		
		OK OK			
OK OK	x	OK OK	x		
OK OK	x				
OK OK	x				
OK OK	x				
OK OK	x				

	Wrap Test	Weight Paid
1.	3	.222
2.	1	.223.1
3.	10	.214.1
4.	20	.219.1
5.	8	.221
6.	14	.216.1
	56 time	

Edging Report

Edged	OK	Re Edged	Disc.
20	15	3	2
3	1	2	
2	2		
	18		2

90% OK

1672-E

Same as 1668-E but press steam on press for 7 minutes.
Make 100 blanks —
Send 24 to Mills.
Report on inspection and edging of all,

C73

7/17/12

1673-E

OK	x	OK	x		Drop test		Calipes Points
OK	x	OK	x	1	—	18	.245
OK	x	OK	x	2	—	20	.239.1
OK	x	OK	x	3	—	9	.252
OK	x	OK	x	4	—	10	.237.1
OK	x	OK	x	5	—	20	.247
OK	x	OK	x	6	—	20	.244
						97	
		OK	x				
OK	x	OK	x		Edging Report.		
OK	x				Edged	OK.	Re Edge	Disc
		OK	x		47	27	18	2
OK	x				18	11	7	
OK	x	OK	x		47	6		1
						44		3

93.6% OK.

Eye Inspection
73¾% OK out of 64 Reams
79.1% OK out of 24 Reams

1673-E

Repeat 1637 and use only 500 pounds pressure on the packing press. Make 100 Blanks — Send 24 to Mills.

Report on inspection and edging of all.

7/17/17

1674-E

OK	x	OK	x				
OK	x	OK	x				
OK	x						
OK	x	OK	x				
OK	x						
OK	x	OK	x				
		OK	x				
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x				

Prof. Set — Surface Point

1.	6	.243.1
2.	3	.225.1
3.	8	.232.1
4.	2	.238
5.	2	.257
6.	2	.237

23 times

Edging Robot

Edge	OK	Stop	Disc.
15.	5	10	
10.	7		3
	12		3

80% OK

169

Separating

Flaw: cracked

Edge [illegible]

1674-E

012 Thick Tin, Aluminum

special blank mould to make more pressure on edge

Make 48 blanks - send all to Willy -

7/17/17

1675-E

OK	OK		Drop test	Calipers Points
OK	OK	1.	20	.225
OK	OK	2.	3	.215.1
OK	OK	3.	3	.227.1
OK	OK	4.	1	.232
OK	OK	5.	20	.235
OK	OK	6.	18	.236.1
OK	OK		65 lines	
OK	OK			
OK	OK		Edging Report.	
OK	OK		Edged	OK.	Re Edged	Dire
OK			67	46	20	1
OK			20	8	10	2
OK			10	6		4
OK				60		7

100% on punching

89.5% OK.

Eye Inspection

2 blanks cracked after coming from lines

92.8% OK out of 14 Reams

93% OK out of 72 Reams

1675-E

Make 100 blanks 1666 powder on 1667 schedule for punching press

7-17-13 — (1675 1/2-E)

Hydraulic Packing press pressure changed from 700 pounds to 640 pounds - 1 Pin

7/18/17

1676-E

			Drop test	Calipers point
OK OK	x		1. — 3	.221.1
OK OK	x		2. — 1	.218
			3. — 6	.225
			4. — 11	.226.1
OK OK			5. — 3	.227.1
			6. — 2	.222
			26 times	
OK OK				
OK OK	x			
OK OK				
OK OK				
OK OK	x			
OK OK	x			

Edging Report

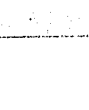
Edged	OK	Edge	Miss
43	31	11	1
11	5	5	1
5	5		—
	41		

95.3%

37.5%

Eye Inspection
52.4% Okay of 82 Records

1676-E
Same as 1661-E except that 3/16 holes are bored opposite cuts in pond thru ring —



Make 100 blanks
send 24 records to Miller

7/18/17

1677-E

OK	x						
OK	x	OK	x				
OK	x						
OK	x	OK	x				
OK	x						
OK	x	OK	x				
OK	x	OK	x				
		OK	x				
		OK	x				
OK	x						
OK	x	OK	x				
		OK	x				
OK	x						

	Drop Test	Caliper Point
1.	5	.220.1
2.	5	.223.1
3.	17	.227.1
4.	19	.230.1
5.	7	.221
6.	3	.219.1
	56 tubes	

Edging Report

Edged	OK	Other	Misc
48	31	15	2
15	10	4	1
4	3		1
	44		4

91.4%

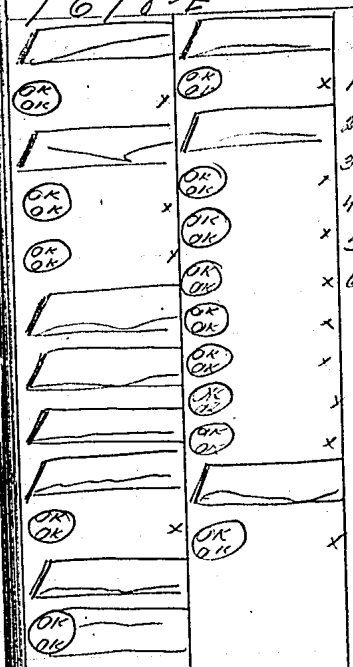
75%

1677-E
Same as 1676 except that 5/8 rubber pad is used —

Eye Inspection
59.2% OK out of 61 tubes

7/18/17

1678-E



Drop test	Calibre Rints
1. — 1.6	.227
2. — 4	.216.1
3. — 10	.222.1
4. — 20	.212
5. — 3	.220
6. — .1	.219.1

54 turns

Edging Report

Edged	O.K.	Re Edge.	Misc.
60	44	15	1
15	10	4	1
4	4		
	58		2

96.6% OK.

Eye Inspection
72½% OK out of 53 Records

1678-E
Same as 1676-E except use 1666 powder

1679-E

OK	x	OK	x				
OK	x			1.	4		.220
				2.	10		.213
OK	x	OK	x				
				3.	16		[illegible]
OK	x			4.	3		.219
OK	x	OK	x	5.	2		.223
OK	x	OK	x	6.	4		.214
					39 tests		
OK	x						
OK	x						
OK	x						
OK	x	OK	x				
OK	x						
				Edging Defects			
				Edged	Ok.	Wrk.	Wrk.
OK	x	OK	x	50	33	15	2
		OK	x	15	10	5	
				5	5		
					48		

75-%

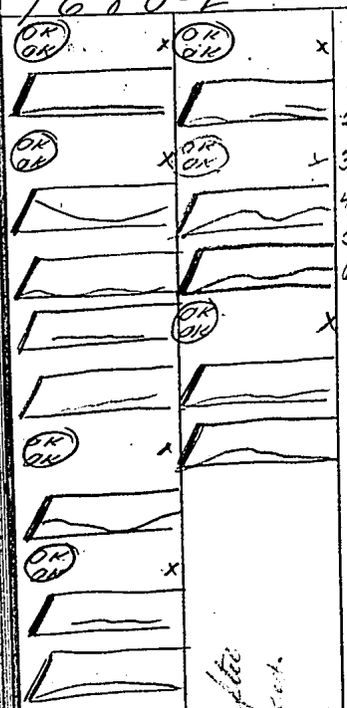
96.3 Ok.

Eye Inspected of
76.9% Ok'ed of 65 Reams

1679-E
Same as 1677 except new
1666 powder —

7/20/17.

1680-E



	Drop Test	Caliper point
1. —	11	.215
2. —	20	.212.1
3. —	20	.206
4. —	5	.215.1
5. —	13	.216
6. —	5	.220
	74 times	

444 inspected
185 OK
259 Discards (222 parallel breaks)

1680-E

Make up sample of 2 bales wood flour from Union Wood flour Co.
Make regular 1666-E

7/20/17

1681

OK OK	x	OK OK	x	Drop Test / Califies Points
				1. — 5 .228.1
				2. — 11 .225.1
				3. — 1 .237.1
				4. — 4 .221.1
		OK OK	x	5. — 2 .226
				6. — 7 .231
				30 turns
OK OK	x	moisture Spot		
moisture spot		OK OK	x	Eye Inspection
		OK OK	x	36.7% Okout of 81 6 Rem
		OK OK	x	

30.4 in punctures

- 1681-E

Make up sample of wood flour from Liquund Chem. Co.

Matrix regular 1666-E

7/19/12

1612-E

1.	20		.216
2.	20		.213
3.	20		.213.1
4.	20		.224.1
5.	20		.211.1
6.	20		.214
	13	10	3
	3	1	1
		11	1

100%

41%

91.6

Dilutoddic
Account for this
on any theory
whatever —
E

1682-E Duplicate 7/20/12

1666-E Order

75%

7/20/17

1683-E

Drop test	Calipers	Points
1.	20	.214
2.	20	.205.5
3.	16	.216.5
4.	20	.212
5.	20	.210.5
6.	20	.232
	116 times	

91.5%

Edging Report

Edgeit OK	Re Edged	Disc.
63	55	
8	8	
63		

100% OK.

Eye Inspection

58.1% Ok out of 58 Reams

1683-E

60 lbs wood
40 lbs chalk
13 lbs Rosin I Grade
50 lbs Alcohol
2 lbs gas black
Dry time 1508
Mould varnish and print regular.
Save 100 blanks for 1686

1683-E Dry time 7/25/17

62.5

7/20/17

1684-E

OK	OK	
OK	OK	
OK	OK	

7/29/12

1685-E

OK OK	x				
OK OK					
OK OK					
OK OK	x	OK OK			
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x				

45 %

Drop Test Calip. Point

1. — 18 .206.1
2. — 10 .213
3. — 20 .209.1
4. — 3 .208.1
5. — 7 .219.1
6. — ~~10~~ .214

68 Turns

Edging Report.

Edged 100 % OK

Eye Inspection

48.3 % OK and 51.59 Recut

1685-E

Make 100 (1666-E) regular blanks except hold steam on press 7 minutes instead of 6½ minutes

1686-E

Drop test	Caliper	Points
1.	20	.220
2.	20	.216
3.	20	.222.5
4.	13	.214.5
5.	20	.212.5
6.	20	.217.5

113 Turns

Edging Report

Edged	O.K.	Re Edged	Disc
66	58	7	1
7	5		2
	63		3

(83.%)

95.5% OK

Eye Inspection

40.5% OK out of 348 Rooms

63.2% OK out of 68 Rooms

Edging Report

Edged	O.K.	Re Edged	Disc
138	130	6	2
6	6		
	136		

98.5% OK.

1686-E

Make 100 blanks 1683 powder but keep steam on press 7 min instead of six minutes.

1687-E

OK OK	x	OK OK	x	Drop test.		Caliper Point	
OK OK	x	OK OK	x	1.	20	.223	
OK OK	x	OK OK	x	2.	20	.200.5	
OK OK	x	OK OK	x	3.	20	.214.5	
OK OK	x	OK OK	x	4.	2	.216.5	
OK OK	x	OK OK	x	5.	20	.217	
OK OK	x	OK OK	x	6.	20	.211.5	
OK OK	x				102 Times		
OK OK	x	FERUS					
OK OK	x	OK OK	x	Edging Rebent			
OK OK	x	OK OK	x	Edged	OK	ReEdge	Disc
OK OK	x	OK OK	x	71	51	18	2
OK OK	x	OK OK	x	18	13	5	
OK OK	x	OK OK	x	5	2		3
OK OK	x	OK OK	x		66		5
OK OK	x	OK OK	x				
OK OK	x	OK OK	x		93% OK		
		96.%		Eye Inspection			
				91% Okad of 78 Recorde			

1687-E
Make 100 blanks from
1684-E Powder Test
hold blank in press for 7 minutes
instead of 1 hr

1688-E

				Drop test	Caliper Points
OK OK	x	OK OK	x	1. — 11	.215
OK OK		OK OK	x	2. — 20	.222
OK OK	x	OK OK		3. — 11	.220.5
OK OK	x	OK OK	x	4. — 20	.215
OK OK		OK OK	x	5. — 20	.214.5
	x	OK OK	x	6. — 17	.227
		OK OK	x	99 times	
OK OK	x	OK OK	x		
OK OK	x				
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		

66. %

Edging Defect

Edgeil	O.K.	Rejects	Edge Dirt
3.5	27	5	
8	6	2	
2	2		
35			

100% O.K.

Eye Inspected 11 23. Instead of 366 Rooms

1688-E

Make 100 blanks 1683 powder but keep steam on press 5 minutes instead of 6 minutes.

7/30/17

1689-E

Drop test	Calipers Points
1. 8	.211
2. 8	.221
3. 18	.2281
4. 20	.312.1
5. 20	.199.1
6. 20	.212
94	

Edging Report

Edged	OK.	Re Edged	Disc
41	32	36	3
36	20	16.	
16	12		6
	62		9

87.3% OK

Edged	OK.	Re Edged	Disc
50	44	5	1.
5	5		
	49		1

98% %

9 to 6

1689-E

Make 100 blanks 1666-E powder but keep steam on press 5 minutes instead of 6 minutes.

Eye Inspection

81.5% OK out of 65 Records

37% OK out of 806. Records. Made 29

1689-E Duplicate 7/24/17

See also 1691

7/23/17.

1690-E

1 ab

1 ab

1 ab

1690-E

Regular powder 1666 with 12% water -
Used regular loading press -
" " press for pressing.
Plates hot to start pressure 600 lbs 1/2 min
before turning off steam, water on
600 lbs pressure until cold.
Baked in oven at 230°

No 1	for 1 hour	.065	% loss in lot.	
2	1 1/2	.078	" " "	
3	2	.088	" " "	Blistered N.G.
4	2 1/2	.117	" " "	
5	3	.112	" " "	
6	4	.129	" " "	

7/23/17

1691-E

Bad Star Spot	OK OK	x	Drop test		Cubic cm
			1. —	20	198.1
FERNS	OK OK	x	2. —	3	210
	OK OK	x	3. —	14	222
	OK OK	x	4. —	10	224.1
FERNS	OK OK	x	5. —	1	199.1
OK OK	OK OK	x	6. —	20	213.1
OK OK	FERNS	x		6 times	
OK OK	OK OK	x			
OK OK			Edging Report		
	OK OK	x	Edged OK.	Re Edged	Disc.
			25	19	6
OK OK	OK OK	x		76.5% OK.	
OK OK	OK OK	1			
OK OK			Eye Inspection		
			37.5% Okant of 48 Records		

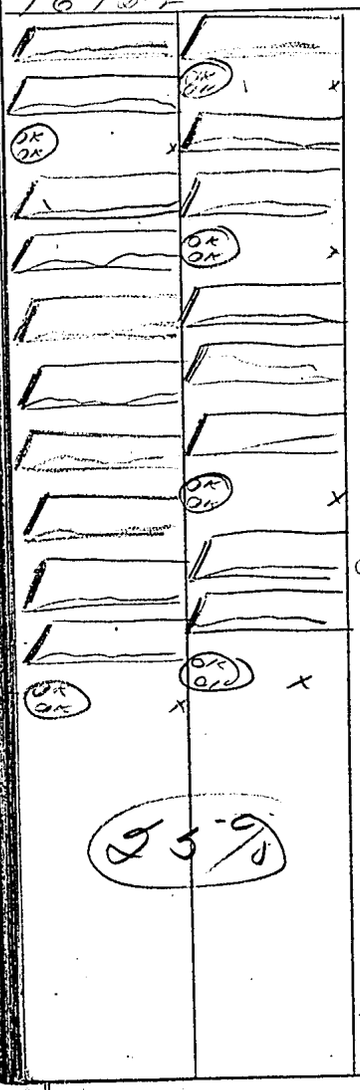
66.6

1691-E

Make 100 blanks 1666 powder regular all thru except hold steam on only five minutes instead of six minutes, this is a duplicate of 1659-E—

7/24/11

1693-E



Edgewise Report-

Edge	OK	Edge	Miss
13	10	1	2
1	1		
	11		

84.6% OK.

Eye Inspection
17.5% OK and 2.5% Rejects

1692-E

Same as 1666 except use 3/4" moulded pad - Send 24 to Miller - Know pads as long as pad is OK.

Pad bulged out above mould - require the 1661 holder -

1/25/17

1693-E

				Drop test	Coefficient Points
OK OK	x	OK OK	x		
				1. — 3	.203
				— 17	210.1
OK OK	x	OK OK	x		
				3. — 3	215.1
OK OK	x	OK OK	x		
				4. — 1	.207
OK OK	x			5 — 20	.219.1
				6. — 20	.218.1
OK OK	x			64 times	
OK OK	x				
OK OK	x				
OK OK	x				
OK OK	x	OK OK	x		
OK OK	x				

5-8.23

1693-E

3/4 pad special moulded with 9/16 deep grooves same pattern as regular set in same holder as 1676.

Make 100 blanks —

7/24/17

1694-E

Low Spot	FERNS		Mech test
Bad Low Spot		FERN	1 — 3
OK OK	OK OK x		2 — 10
	OK OK Lines 1	Low Spot	3 — 4
Low Spot	OK OK x	Bad Low Spot	4 — 1
Low Spot	OK OK x	Low Spot	5 — 3
FERN	OK OK x	OK OK Low Spot	6 — 1
OK OK x	Low Spot	FERN	2 2 times
		OK OK Low Spot	Calipers Pounds
	OK OK x	Low Spot	221 — 216.1
OK OK x	OK OK x		219.1 — 220
FERNS			226.1 — 223
Moisture Spot	OK OK x		
		OK OK x	

38.8°

1694-E

Print ~~one hundred records~~ (96) regular except operation (6) when mercury reaches line on thermometer (200° F) wait three minutes and then bring pressure up very slowly and leave valve open. (Only 36 printed)

See full schedule in back of this book.

7/24/17

1695-E

				Drop test	Critical Pressure
OK OK	X	OK OK	X		
		OK OK	X	1 — 20	.215.1
		OK OK	X	2 — 20	.219
		OK OK		3 — 1	.224
		OK OK	X	4 — 1	231.1
OK OK	X			5 — 10	.228.1
				6 — 15	.231
		OK OK	X	70 lines	
		OK OK	X		
OK OK	X	OK OK	X		
OK OK	X				
		Diaphragm Cap			
OK OK	X	OK OK			
OK OK	X				

583°

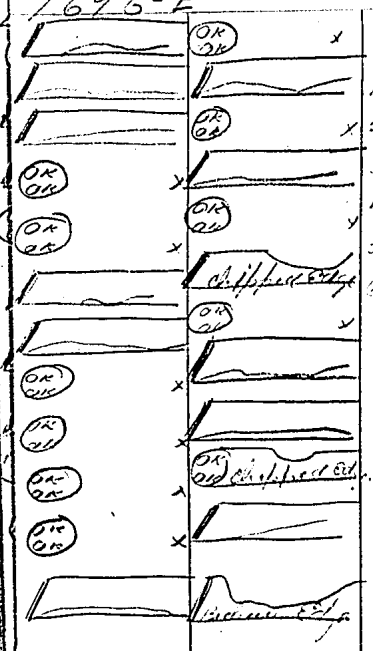
1695-E

Print 24 records regular except operation (6) When mercury reaches 180° put pressure on full, then time the next operation from the time the thermometer reaches the line (200° F) as usual. Send all to Miller.

See schedule in back of this book.

7/25/17

1696-E



	Drops	Boiling Point
1. —	6	.229
2. —	20	213.1
3. —	9	241.1
4. —	3	.232.1
5. —	20	.227
6. —	18	.223

76 times

1696-E

Make 100 blanks 1666-E except hold steam on press only 4 minutes instead of six minutes.

[81]

7/26/17

1697-E

			Drop test	Calipsofoints
	OK OK	x		
	OK OK	x	1. — 20	.224.1
			2. — 20	.218.1
OK OK		x	3. — 20	.217
OK OK		x	4. — 20	.225.1
	OK OK	x	5. — 20	.229.1
OK OK		x	6. — 20	.215
			120 times	
OK OK	OK OK	x	x	
	OK OK		x	

40.9%

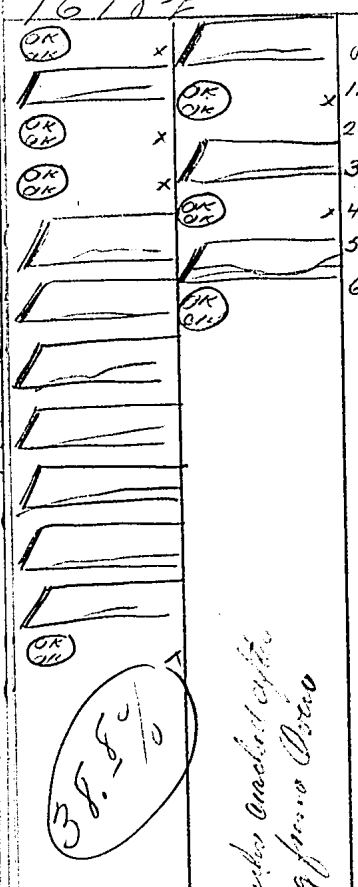
2 Planks another rejects coming from Grand

1697-E

Repeat 1684-E test use instead of ½ Empost and ½ Norway wood ½ Garrigas and ½ Norway-

7/25/17

1698-E



	Drop test	Caliper Points
1.	10	.216
2.	20	.223.1
3.	3	.215
4.	8	.223
5.	3	.213.1
6.	7	.219
	51 tests	

1698-E Regular 1666-E powder

Oil the blank mould ring with machine oil, wipe it on with a rag. Make 24 blanks — Send all to mill.

7/25/11

1699-E

		Drop test	Califico Points
		1. — 20	221.1
	Minutiae Spot	2. — 12	216.1
		3. — 20	.226
		4. — 20	.214
		5. — 17	.220
		6. — 13	.218
		92 times	

26%

3 Plants made of [illegible] containing [illegible]

1699-E Regular 1666-E Powder -
Treat blank mould ring with "Tanning" solution
Make 24 blanks - send all to mills.

7/25/1

1700-E

	OK OK	x	Drop test	Calibre Pounds
OK OK		x	1. — 20	.221
			2. — 20	.225.1
OK OK		x	FFRAAS 3. — 10	.234
			4. — 3	.227.1
			5. — 1	.216.1
			6. — 1	.218.1
			4 Strikes	
OK OK		x		
OK OK		x		
FFRAS				
OK OK		x		
40%				

2 Flash ignition

1700-E Regular 1666-E Powder — Same as 1698-E but use Kubrica instead of oil — only received 7 pounds on this wheelwheel

7/25/17

1701-E-1	1701-E-2
OK OK x	ark 1 blk
moisture spot	OK OK x
OK OK	
ark 1 blk	OK OK x
OK OK x	
ark 1 blk	
ark 1 blk	OK OK x
25%	25%

1701-E-~~and~~ 2 req 1666-E

(1) Make 12 regular blanks between 1698 and 1699 -

(2) Make 12 regular blanks between 1699 and 1700 -

To check — send all to mills.

1702-E	1702-E-C 7/25/17
OK OK x	OK OK x
OK OK x	OK OK x
OK OK x	OK OK x

1703-E		1703-E-C 7/27/[illegible]	
	OK OK x		OK OK x
	OK OK x		
	OK OK x		
OK OK x		OK OK x	OK OK x
OK OK x		OK OK x	OK OK x
OK OK x			OK OK x
OK OK x		OK OK	OK OK x
OK OK x	OK OK x		
OK OK			
45.4	1 Hands cracked.	37.4	1 Hands cracked at after commencing firing

1703-E Same as 1703-E except use 1666-E powder —
1703-E-C- Click on same powder — Send all to Dublin for inspection.

7/26/10

1704-C

1704-E

Mark 1 Blk

OK OK

37.5%

4 blanks discarded for Edge Defs

50%

2 blanks [illegible] for Edge Defs

1704-E

24 blanks made on same machine as 1703-E but shoulder turned as [illegible] 3/8 in below top of adjusting ring 1666-E powder.

1704-E-C

24 blanks same powder regular way to check.

Edging Report 1704-E

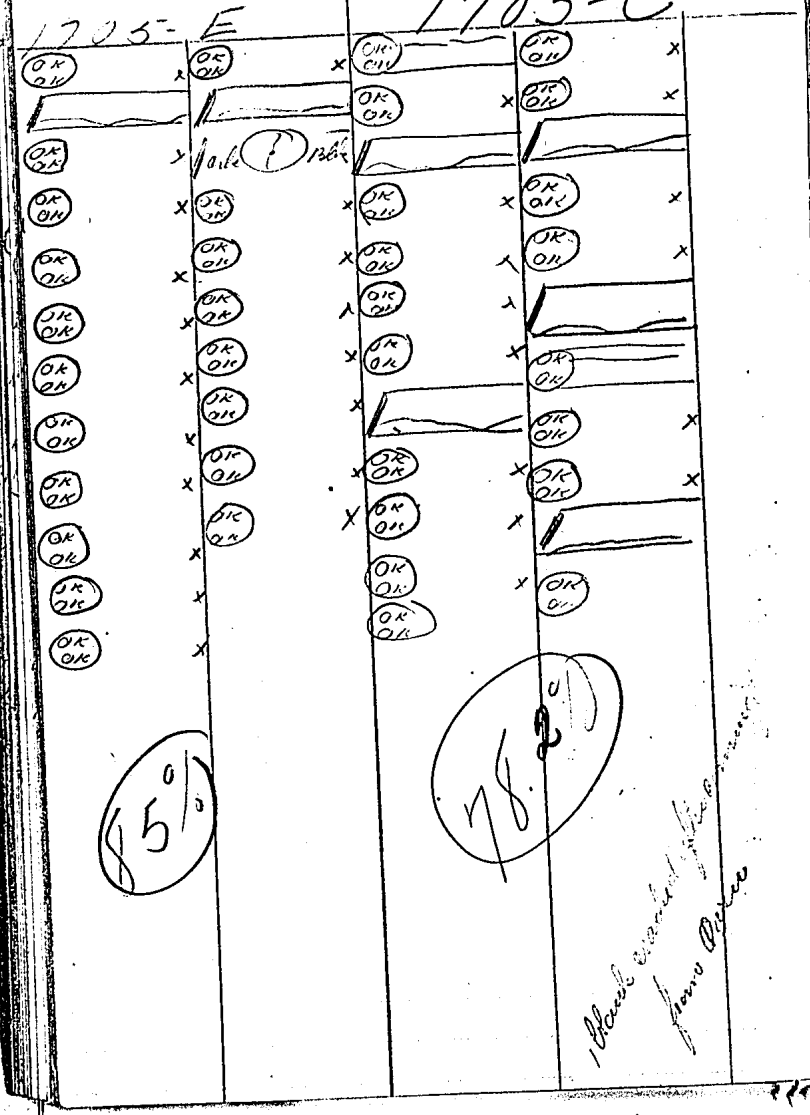
Edge	OK	Edge Defs	Mars
16	6	3	1
3	3		
	9		

95 %

7/26/17

1705-E

1705-C



1705-E

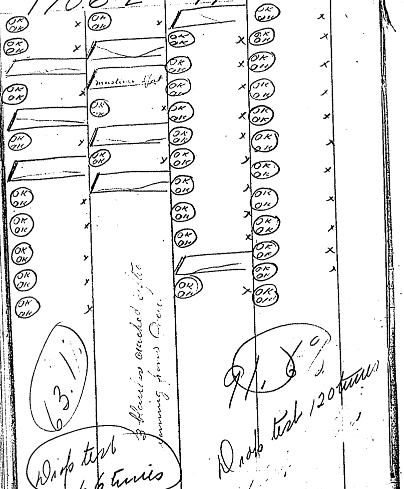
Same as 1704-E except that the bagging is not loaded in the hopper, but overflow out and dump into the barrel. Weighed out 545 grammes each time.

1705-E-C

Regular to Checks made out of the same grades.

7/26/17

1706-E   1706-E-C



63.1%

Drop test 66 times

Plaques cracked [illegible] coming from Oven

91.8%

Drop test 120 times

1706-E

Same as 1705-E except that the powder is weighed out in two lots of 272½ grammes each and each layer is stamped separately.

1706-E-C is made regular at the same time for check –

The drop test is pretty sure evidence that the two lots were mixed,

also positive proof is that the 1706-E was abnormally thick

7/26/17

1707-E

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

JK OK x

58 %

58 %

No Drop test

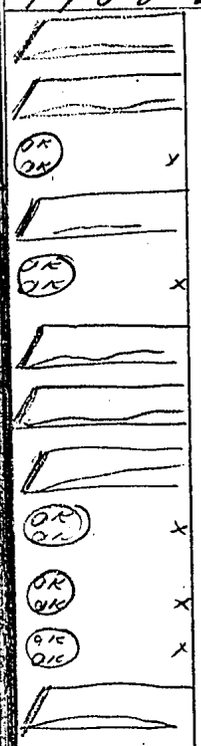
Edging Report

Edged	Ok	Re Edged	Disc
6	5		1

533°, Ok

1707-E Same as 1705-E except that tool is adjusted 1/4" below addapter ring and hydraulic press operation is omitted entirely. 12 blanks made —

1708-E



No Proof Test
Edging Report.
Edged OK ReEdged Mix
5 5
100%

1708-E

Same as 1707 except that tool is started adjusted 5/8 inch below top of adaptor ring and as normal pressure is applied it is forced up to 1/2 inch below top of adaptor ring.

7/26/17

1709-E

| | | |

7/26/17

1710-E

OK	OK		Drop test	Melting Point
	OK		1. — 20	.221
OK			2. — 20	.226
OK			3. — 20	.232
			4. — 10	.216
	OK		5. — 20	.230.1
OK			6. — 20	.223
OK			110 times	
OK				
OK			Edging Report	
OK			Edged OK / Re Edged / Discs	
OK			6 4 2	
OK			2 0	
OK			6	
OK			100% OK	
OK				
	OK			

58.30

1710-E

Make ~~[illegible]~~ 48 regular 1666-E Blanks except take the blanks out of the press hot! so that you can just bear your hand on the moulds.

7/2-6/17

1711-E

29.1%

Edging Report

Edged Ok.	Edged Ok.	Edged Ok.
6	4	2
3	2	

100%

1711-E

Print 48 records on regular 1666 Blanks but put on the high pressure as slowly as possible.

Send all to mills -

C(1)

7/23/12

1712-E

Drop Test	Califico Penn
1. — 14	.184
2. — 20	.196
3. — 20	.203
4. — 20	.191
5. — 20	.188
6. — 20	.196
114 times	

Edgers Report

Edged	OK	Re Edged	Wrk
19	17		3

89 4/9

91.6%

1712-E

Put 100 pounds of regular 1666-E powder in small Day mixer and add one pounds Straw oil. Mix ½ hour — Make up regular — Varnish and print regular

Blades show a lot of little lumps scatter all over

7/28/17

1713-E

	OK	x				
OK	x					
		OK	x			
OK	x	OK	x			
		OK				
OK	x	OK	x			
		OK	x			
OK	x	OK	x			
OK	x					
		OK	x			
OK	x					
OK	x					

Drop test		Caliper Point
1.	20	.212
2.	20	.206
3.	4	.221
4.	20	.215
5.	20	.206
6.	20	.214
	104 times	

Edging Report

Edged	OK.	Re Edged	Disc
11	6	4	1
4	2	2	
2			2
	8		3

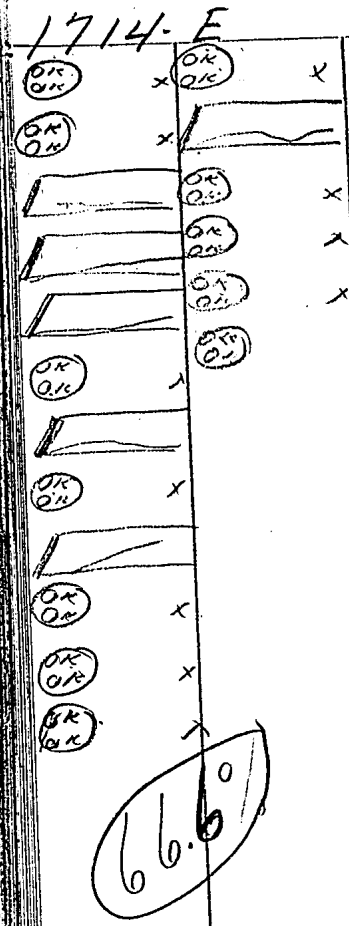
72.8% OK

62.5%

1713-E
Same as 1712-E except use 2 pounds water instead of the straw oil.

7/27/11

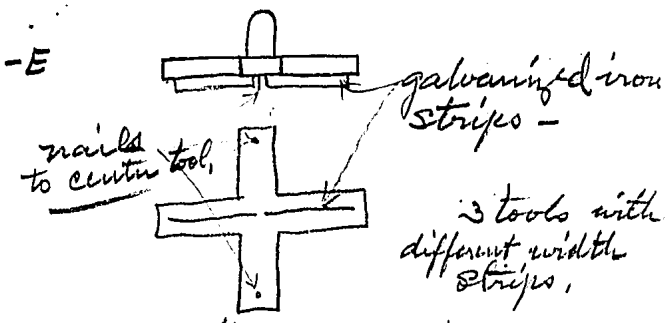
1714-E



Drop test	Calipers Points
1. — 20.	.209
2. — 2	.210
3. — 14	.201
4. — 3	.221
5. — 20	.192
6. — 20	.206

79 tests

1714-E



Use exactly as tools in 1709-E

Only made 18 tools.

7/27/17

1715-E

OK OK	x	OK OK	x		Drop test		Calibrated Points
OK OK	x	OK OK	x	1	20		.210
		OK OK	x	2	20		.189
OK OK	x			3	20		.210
		OK OK	x	4	20		.203
OK OK	x			5	20		.202
				6	20		.209
					120 strikes		
OK OK	x						
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x						
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				

83.3/0

1715-E

Same as 1712-E except use one pound Rosin Oil instead of Straw Oil—

Make 24 blanks send to Miller—

Blanks show little Cracks scattered all over.

7/27/17

1716-E

OK	x	OK	x	Drop	test	Califico	Counts
OK	x	OK	x	1.	20		.210
OK	x			2.	20		.221
				3.	20		.225
OK	x			4.	20		.221
OK	x	OK	x	5.	20		.207
		OK	x	6.	20		.215
OK	x	OK	x		120 times		
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x				
OK	x	OK	x				
OK	x						

91.6 0 16

1716-E

Same as 1712-E except use one pound Glycerin instead of Straw oil —

Make 24 blanks send Records to Miller —

Blanks [illegible] cell over Records M. C. on account of spots.

7/27/17.

1717-E

| | | |

7/27/17

1718-E

				Drop test	Caliper Point
OK OK	x			1. — 20	.210
		OK OK	x	2. — 20	.203
				3. — 20	.210
OK OK	x	OK OK	x	4. — 20	.200
				5. — 20	.203
				6. — 20	.209
				120 times	
OK OK	x	OK OK	x		
OK OK	x				
Bad Sample					
OK OK	x	OK OK	x		
		OK OK	x		
OK OK	x	OK OK			

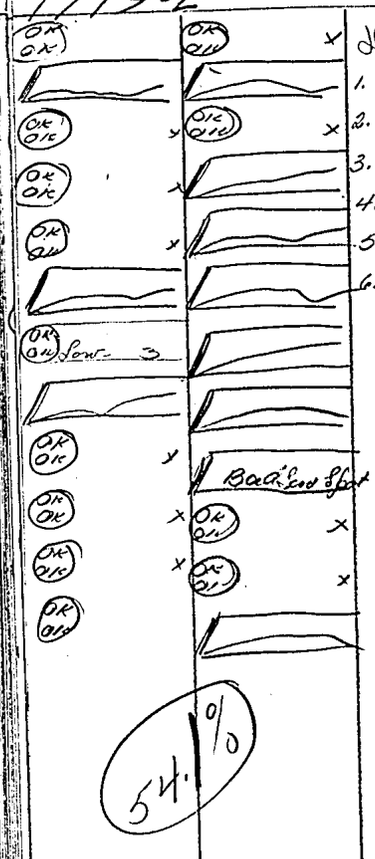
1718-E

Same as 1712, except use one pound Calcium chloride (approx) in ~~[illegible]~~ solution in water —

Make up 24 blanks — send records to Miller,

7/27/17

1719-E



	Drafo-test	Calif. Co. Cem.
1.	20	.236
2.	20	.237
3.	20	.244
4.	20	.235
5.	20	.241
6.	20	.229
	120	

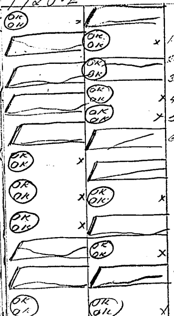
1719-E

Same as 1712 except use one pound Sal Ammoniac dissolved in water.

Make up 24 blanks - send records to Miller.

7/23/17.

1720-E



	Drop test	Caliper Points
1.	20	.226
2.	20	.218
3.	20	.212
4.	20	.218
5.	20	.212
6.	20	.213
	120 times	

Edging Report

Edged	OK.	Re-Edged	Misc
10	9	1	
	1		
	10		

100% OK

50%

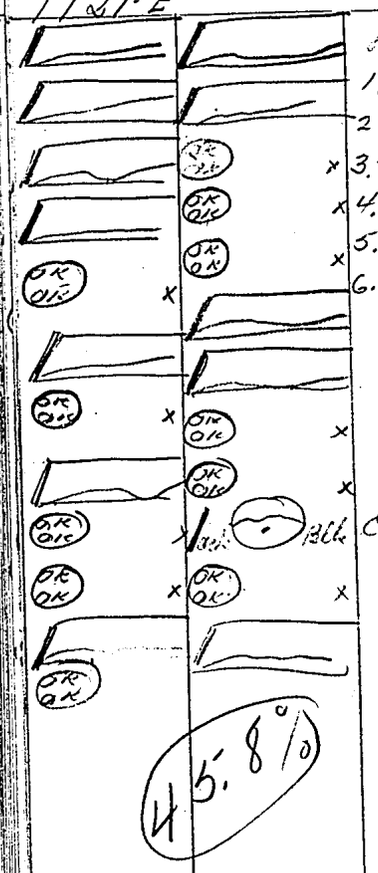
1720-E Blanks Press schedule -

1 Bring to contact - slow pressure,
2 Steam on - set clock -
3 Hydraulic pressure on - 2½ minutes after steam,
4 Steam off after 4 minutes more,
5 Remove from press warm,

Make 48 blanks send **all** to Miller -

7/27/17

1721-E



Drop test		Calipers Points
1.	20	.207
2	20	.216
3.	20	.207
4.	20	.202
5.	20	.221
6.	20	209
	120	

Edging Report

Edged OK	Re Edged	Misc
10	7	3
3	3	
	10	

100% OK

1721-E Blank Press Schedule -

1 Bring to contact - low pressure
2 Steam on - set clock.
3 Hydraulic pressure on 4 minutes after steam,
4 Steam off after 4 minutes more,
5 Remove from press warm,

Make 48 blanks - Send all records thru to Miller,

This experiment and several preceding - shows by drop test that the parallel cracks have nothing to do with the strength of the blank.

C131

7/27/17

1722-E

OK OK	x	OK OK	x		
		OK OK	x		
OK OK	x	OK OK	x		
		OK OK	x		
		OK OK	x		
		OK OK	x		
OK OK	x	OK OK	x		
OK OK	x				
OK OK	x	OK OK	x		
		OK OK	x		
Total 1		1			

53.8%

Drop test Calipers

1.	20	.222
2.	20	.211
3	20	.205
4	20	.223
5.	20	.207
6.	20	.215
	120 times	

Edging Report

Edged	Old	Re Edged	Dum
12	8	4	
4	3	1	
1	1		
	12		

100% OK

1722-E

Blanks Press Schedule -

1. Bring to contact - low pressure
2. Steam on - set clock.
3. Hydraulic pressure on 4 min after steam,
4. Steam off after three minutes more,
5. Remove from press warm,

Make 48 send all them to mills,

High drop test on this experiment and the two previous - and also other experiments with oil etc indicates some other change in powder - other than what is done in the experiments. 7/27/17 due to different wood flour - ?

7/27/17

1723-E

| | | |

7/28/1

1724-E

OK OK	x	OK OK	x	Drop test		Calipers Pen.	
FERNS		OK OK	x	1.	20	.210	
OK OK	x	OK OK	x	2.	20	.199	
OK OK	x	OK OK	x	3.	20	.193.1	
OK OK	x	OK OK	x	4.	20	.205	
OK OK	x	OK OK	x	5.	20	.196	
OK OK	x	OK OK	x	6.	20	.207	
OK OK	x	FERNS		120 tubes			
OK OK	x						
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
		OK OK	x				
OK OK	x	OK OK	x				

1724-E

Repeat 1712-E using atomizer to spray the oil into the mixer.

7/28/17

1725-E

OK OK	x	OK OK	x	Drop Test		Calibra Point
		OK OK	x	1	— 20	.211
		OK OK	x	2	— 20	.204
		OK OK	x	3	— 20	.199.1
		OK OK	x	4	— 17	.221
OK OK	x	OK OK	x	5	— 20	.213.1
		OK OK	x	6	— 3	.217
		OK OK	x		99 turns	
		OK OK	x			
OK OK	x	OK OK	x			
		OK OK	x			
OK OK	x	OK OK	x			
		OK OK	x			

66.6%

1725-E

Repeat 1717-E using atomizer to spray the oil into the cuvette

Knowlen

7/28/11

1726-E

	OK OK	x	Drop tests	Calibre Pressure
OK OK	x	OK OK	x	1 — 20	224.1
				2 — 13	199.1
				3 — 20	195
OK OK	x			4 — 20	203.1
OK OK	x	OK OK	x	5 — 4	212
				6 — 10	227
OK OK	x	OK OK	x	87 times	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
		OK OK	x		
OK OK	x				
OK OK	x				

75%

1726-E

Make one drier full of 1666-E powder regular except add 18 pounds Istraw oil to one drum of varnish.

Painter one [illegible]

C1411

7/28/11

1727-E

OK OK	x	OK OK	x	Drop test	Califco Pan
OK OK	x	OK OK	x	1. — 20	.201.1
				2. — 20	.193.1
OK OK	x	OK OK	x	3. — 20	.158
		OK OK	x	4. — 20	.205.1
				5. — 20	.210
				6. — 20	.199.1
OK OK	x	Bad Spot		120 times	
		OK OK	x		
		OK OK	x		
OK OK	x	OK OK	x		
		OK OK	x		
Bad Con Spot		OK OK	x		

1727-E

Repeat 1712 using large atomizer on compressed air,
300 lbs powder
3¼ lbs ~~[illegible]~~ Straw oil in atomizer — Run mixer 5 min after all oil is atomized,

7/38/17

1728-E

OK	x	OK	x			
		OK	x			
		OK	x			
OK	x	OK	x			
OK	x					
		OK	x			
OK	x	OK	x			
OK	x					
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			
OK	x	OK	x			

Drop test		Calibrec Point
1	20	.209
2	12	.215
3	20	.208.1
4	20	.215
5	20	.199.1
6	20	.203
	112	times

8 3 30

1728-E

Repeat 1717-E except use large atomizer on compressed air
300 lbs powder
3 1/4 lbs Kerosene in atomizer
Run water 5 min after all oil is atomized.
Large Dry Minam.

[145]

7/30/17

1729-E

FERNS

Bad Spot

Bad Spot

Drop test	Caliper Point
1. — 20	.210
2. — 20	.213.1
3 — 16	.199.1
4. — 20	.225
5. — 20	.203.1
6. — 20	.223
116 turns	

133°C

1729-E

Same as 1724-E except use one pound light Machine oil — Blanks show up little concave

7/30/17.

1730-E

OK OK	x	OK OK	x		Drop test		Calibration
OK OK	x	OK OK	x	1	—	20	203.1
OK OK	x	OK OK	x	2	—	20	.216
OK OK	x	OK OK	x	3	—	20	.195.1
OK OK	x	OK OK	x	4	—	20	.232
OK OK	x	OK OK	x	5	—	20	.225
OK OK	x	OK OK	x	6	—	20	.212.1
OK OK	x	OK OK	x		120 times		
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x						

95.8°

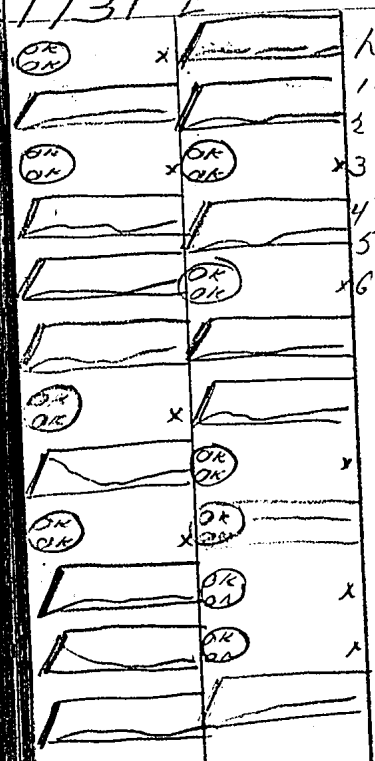
[redacted] 1730-E

Same as 1724-E except use one pound Oleic acid.

Blanks [illegible]

7/30/17.

1731-E



Drop test

1 — 20
2 — 10
3 — 20
4 — 20
5 — 2
6 — 20

92 times

1731-E

Same as 1724 except use one pound liquid carbolic acid. Use great care not to get burned with the spray and also watch the powder very carefully so that no one is burned with it.

7/30/17

1732-E

OK OK	x	OK OK	x	Drop test		Calipers Points	
OK OK	x	OK OK	x	1	—	20	.219.1
		OK OK	x	2	—	20	.233
OK OK	x			3	—	20	224.1
		OK OK	x	4	—	20	.220
				5	—	20	236
		OK OK	x	6	—	20	.227.1
OK OK	x					120	
OK OK	x	OK OK	x				
OK OK	x						
		OK OK	x				
OK OK	x						
OK OK	x	OK OK	x				
OK OK	x						
Bad Low Spot							
OK OK	x						

75%

1732-E
Repeat 1723 - make 500
blanks

497 records inspected.
49 rough spots.
18 low spots.
192 parallel c/ks
3 misel.
3 stain.
2 veneers.
2 misel.
2 P.O.
1 dent.
2 stain.
total 48% OK.

7/30/17

1733-E

	Drop test	Calipers Point
1	20	.220.1
2	20	.219
3	13	.221
4	4	.217.1
5	20	.210
6	10	.224.1
	87 turns	

68.5%

1733-E

Select 100 regular blanks that extract free – that show no signs of requiring great force to get them out,

CISST

7/30/11

1734-E

OK OK	x	OK OK	x
OK OK	x	OK OK	
OK OK	x		
		OK OK	x
OK	x		
OK OK	x		
OK OK	x	Ech (1) Blk	
		OK OK	x

41 6

Drap test

1	20
2	20
3	20
4	20
5	20
6	20
	120

1734-E 100 blanks.

Select the blanks that seem to stick in the moulds or show the greatest force required to extract at the same time that 1733-E are being selected –

7/30/11

1735-E

OK OK	×	
OK OK	×	
OK OK	×	
OK OK	×	
OK OK	×	
		OK OK ×
		OK OK ×
OK OK	×	
1 lb.		OK O.K. ×

37 5.0%

Drop test
1 — 20
2 — 20
3 — 11
4 — 17
5 — 20
6 — 20

108 times

1735-E

Make one drier full -
60 lbs wood -
40 lbs chalk -
12 lbs Rosin -
2 lbs gas black -
→ 60 lbs alcohol
make regular all them

16 bags - 12½ bags from grinder.

ground 76% 180 , 57% 350

7/30/17

1736-E

	Drop test	Coefficient
1	20	210.1
2	20	228.1
3	20	.229
4	10	231
5	20	219.1
6	20	.224.1
	110 turns	

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

OK OK x

45 8 0

1736-E

Same as 1735-E except Put wood flour and lampblack in mixer first. Mix 10 min then add gum Mix 10 min - Then add chalk Mix 10 min.

Make regular all three - after mixing.

16 bags before grinding.
11½ after grinding.
10 bags fine 1 bags tailings.

ground	76%	180
"	58%	350
Screened	98%	180
"	82%	350

CKT

7/30/17

1737-E

Drop test	Calipers
1. — 7	.215.1
2. — 20	.223.1
3. — 11	.227.1
4. — 15	.198
5. — 20	.212
6. — 20	.220

93 times

91.6%

1737-E

Same as 1666-E except mixed like 1736-E

14 bags before grinding 11 bags after grinding

after screening 1 bag tailings.

ground	78%	180	57%	350
Screened	98%	180	83%	350

1737-E Duplicate 7/31/17

68.5%

7/30/17

1738-E

			Drop test	Caliper Point
			1 — 20	.219
OK OK	x	OK OK x	2 — 20	.227
		OK OK	3 — 20	.231.1
OK OK	x		4 — 18	218.1
			5 — 4	.225
OK OK			6. — 20	.223.1
			102 tests	
		OK OK x		
OK OK	x			
OK OK	x	OK OK		
OK OK	x	OK OK x		
OK OK	x			

50%

Same proportions as 1666-E

1738-E Three large mixers made July 29-17

3 × 60 lbs wood flour 180 lbs

3 × 62 lbs gum (Varnish) 186 lbs (36 mine) (150 initial)

Mixed 10 minutes —

Add chalk thru 8 mesh screen. 150 36 120 6 342 3 minus 1026 lbs total

3 × 40 lbs — 120 lbs.

Mixed 10 min

Add lamp black 6 lbs.

Mixed 10 min —

Dry grind screen regular —

Mould varnish & print regular —

after July 30 this powder regular — but dried out 1508 schedule (2 hours)

7/31/17

1739-E

OK OK	x	OK OK	x	Snap Test	Caliper Point
OK OK	x	OK OK	x	1. — 20	223.1
OK OK	x			2. — 20	.228
				3. — 20	.231.1
OK OK	x	OK OK	x	4. — 20	.219
OK OK	x	OK OK	x	5. — 20	.210.1
OK OK	x	OK OK	x	6. — 20	.221
				120 times	
OK OK	x				
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
		OK OK	x		
OK OK	x	OK OK	x		
OK OK	x				

869

1739-E Dried only 1h 45m
otherwise same as 1738-E

522	eye inspected.
102	parallel cracks.
7	rough spots.
10	snaps.
8	stains.
8	miscellaneous.
135	total discards.

total 74% OK.

1740-E Powder regular 1738-E except ground in hot mill. (Selected when mill is hot.)

1741-E

1741-E Powder regular 1738-E except ground when mills are comparatively cool-

P.

510 records

	1 P.O.	Turned line 7 pins
	167 P.C.	1
	2 R.C	1 scratch
	4 Broken	
	5 stamps	2
Sy.	1 dent	
	5 low	
	5 image	2
	1 silver	
	24 rough spots	1
	215	7
	222 discards	
	288 OK	56.4% OK,

(17)

7/31/17

1742-E

		Drop test	
		1. — 14	.196
		2. — 20	.203.5
OK OK	×	3. — 20	.211
		4. — 20	.200
OK OK	×	5. — 10	.210
OK OK	×	6. — 5	.195
		89 times	
OK OK	×		

16.610

1742 E Bevel about 300 (regular 1666 Blanks) very slowly so that diamond takes a very small cut and runs no risk of straining the edge — Print 24 regular and send to Hilliar. Hold others for experiments.

1743-E Make 100 blanks 1738 powder
dried on 2 hour schedule
~~powder~~ Moulded regular —
Pressed 7 min with steam
air instead of 6 min —
Varnished and printed regular
Send 24 to Miller —

8/2/17

1744-E

OK OK	x	OK OK	x
		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK Scr. 2		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x		
OK OK	x		
OK OK	x		

95 4

2 Shown Marks [illegible]
Dummy bore size

Drop test		Caliper Point
1.	20	
2.	30	
3.	8	
4.	12	
5.	20	
6.	4	
	8 4 times	

1744-E Make one drier full of 1738 powder dried only one and a half hours.
Mould varnish and print regular but save powder for 100 blanks for 1745-E
send 24 records to miller
save 100 blanks for other experiments.

Print on 600 lbs pressure

8/2/17	8/3/17
266	489 records inspected.
42	70 Parallel cks.
7	9 Stains.
12	158 rough spots.
	3 miscellaneous.
15	8 snaps
1	17 low print.
	15 rough spots
	4 misc.
	9 rough spots.
2	25 low spots.
14	4 Miscellaneous.
2	dents
total 69 1/10 %	total 42 5/10 % OK

eye

machine.

5/2/1

1745-E

OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK Low 3		Chipped Edge	
Bad Low Spot		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
Bad Low Spot		OK OK	x
OK Low 1		OK OK	x
OK OK	x	OK OK	x
Bad Low Spot			
Bad Low Spot		Bad Low Spot	

Drop test
1 — 5
2 — 20
3 — 20
4 — 20
5 — 20
6 — 20
105 times

75%

1745-E 100 blanks of 1744 powder moulded regular but pressed with steam air 7 minutes instead of 6 minutes.
Send 24 to Nibbler —
Save others for other experiments
Pointed on 600 lb pressure —

1745-E 125 lb steam pressure 5/2/1

Low Spot		Low Spot	
OK OK	x	OK OK	x
		Low Spot	
OK OK	x	Low Spot	
Low Spot			
Low Spot		Low Spot	
Low Spot		Low Spot	
Low Spot		Low Spot	
		Low Spot	
Low Spot		Low Spot	

Drop test
1. — 15
2. — 20
3. — 9
4. — 3
5. — 17
6. — 14
78 times

8 1/3 %

8/[illegible]

[illegible] x	[illegible] x	
[illegible] x	[illegible] x	20
[illegible] x	[illegible] x	20
[illegible] x	[illegible] x	13
x	[illegible] x	20
[illegible] x	[illegible] x	20
[illegible] x	OK OK x	20
[illegible] x	[illegible] x	113 tires
[illegible] x	[illegible] x	
[illegible] x	[illegible] x	
[illegible] x		
[illegible] x		

9/6

1746-E 1738-E dried 2 hours.
Take about 300 lbs finished powder after final screen and mix for 30 minutes in Day mixer then mould immediately

188 Records 126 O.K.

67% O.K. 62 discards

- 24 Parallel C/cs
- 1 radial
- 2 bruise
- 1 dent –
- 3 low spots
- 2 swirls
- 5 silver
- 24 rough spots

188

1746-E Duplicate

		Caliper Point
OK OK x	OK OK x	.220
OK OK x	OK OK x	.198
OK OK x	Low Spot	.212
OK OK x	Low Spot	.205
	Low Spot	.201
OK OK x	Low Spot	.209
OK Low Spot OK	OK OK x	
Low Spot	OK OK x	
Low Spot		
Low Spot	OK OK x	
Low Spot	OK OK x	
Low Spot	OK OK x	
50.%	58 1/3 %	

1747-E

20	[illegible]	.019
20	226 / 210	.0[illegible]
20	226 / 202	.0[illegible]
20	231 / 216	.0[illegible]
20	226 / 212	.019
120	224 / 219	.021

edging report on 24 records
[illegible]% O.K.

100%

1747-E

Edge 24 blanks with very large bevel to make a sharp edge in center.

Varnish and print regular
send to Mills.

1748-E

				Drop test	Calipers	Points
OK OK	X	OK OK	X	1. — 1	[illegible]	[illegible]
OK OK	X	OK OK	X	2. — 4	[illegible]	[illegible]
				3. — 1	.234	[illegible]
OK OK	X	Low-Spot		4. — 1	[illegible]	[illegible]
OK OK	X	OK OK	X	5. — 1	.22575	[illegible]
				6. — 3	.231	[illegible]
OK OK	X	OK OK	X	10 times		
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
OK Low-Spot OK		OK OK	X			
OK OK	X	OK OK	X			
OK OK	X	OK OK	X			
102 %		91 2/3 %				

1748-E

57 wood
43 chalk
2 coarse blanch

Use same gum, mix, dry and make blanks same as 1738-E
Make one drier full.
Varnish and print regular
send 24 to miller and hold others until we see how the first 24 look.

1749-E

Print 100 records having steam on for 2 minutes longer time — Inspect for stains — etc and send detail report to Miller.

Report from Kennedy —

96 records 52 O.K.

44 discards { 19 parallel cfx.
2 snaps.
23 rough spots

96

54 1/10 % O.K.

Power Office 8/7/17
1746-E
600 lbs Blk Pressure
Angels Wards

8/13/17
500 lbs Bitu Pressure
1746-E

	Low Start	OK OK	OK OK
OK OK Cow Start	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
		OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Stain
OK OK	OK OK		OK OK
OK OK		OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK		OK OK	OK OK
OK OK			
83%	75%	100%	91%
75%			

8/14/17
1746-E

	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
Cow Start	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
OK OK	OK OK	
83%	100%	

Schedule of Operations
Record Press

1. Look press over and be sure it is clear.
2. Don't forget to Hook truck to press before entering moulds in press.
3. Line moulds up, and be sure there is a pipe in every Mould, and that there is nothing lying on Moulds, such as parts of moulds, clamps or pins which will dent moulds and platens of press.

4. Bring moulds up to Contact carefully and very slowly, needle first off pin.

5. Turn on Steam.

6. When mercury reaches line on thermometer (200°F) bring high pressure up very slowly and leave valve open.
7. Set your clock and let moulds rest on full steam and pressure for twelve (12) minutes; be sure to blow your press out when on steam after two (2) minutes, and again after six (6) more minutes for about one-half minute.
8. Turn off steam and let steam exhaust from press.
9. Turn on water.
10. When Moulds are cold, to truck, turn off cooling water, close finger pressure hydraulic valve, open up hydraulic exhaust valve to relax press.
11. Hook Truck to press, transfer moulds from press to truck. Do not turn Moulds out of press with one pull. Shift them in truck by hand, cutting moulds so as not to miss any as they will fall to the floor when taking the truck from the press.

Records sent to Robbins each day.

July	
16	7,[illegible]
17	14,255
18	15,037
19	13,520
20	13,[illegible]
21	4462
Sunday.	
22	7,076
24	5155
25	7112

Report on Output

	Flu. Stand	Ok.	%
14	15327	14,297	93.[illegible]
17	16,159	15,[illegible]	[illegible]
18	13626	13,753	94.[illegible]
19	14,753	14,306	96.[illegible]
20	12456	11947	95.[illegible]
21	5,926	5691	96.
Sunday			
23	5979	5611	95.[illegible]
24	[illegible]	8169	[illegible]

C1997

A Note on the Sources

The pages which have been filmed are the best copies available. Every technical effort possible has been made to ensure legibility.

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END

FINANCIAL CONTRIBUTORS

We thankfully acknowledge the vision and support of Rutgers University and the Thomas A. Edison Papers Board of Sponsors.

This edition was made possible by grant funds provided from the New Jersey Historical Commission, National Historical Publications and Records Commission, and The National Endowment for the Humanities. Major underwriting has been provided by the Barkley Fund, through the National Trust for the Humanities, and by The Charles Edison Foundation.

We are grateful for the generous support of the IEEE Foundation, the Hyde & Watson Foundation, the Martinson Family Foundation, and the GE Foundation. We acknowledge gifts from many other individuals, as well as an anonymous donor; the Association of Edison Illuminating Companies; and the Edison Electric Institute. For the assistance of all these organizations and individuals, as well as for the indispensable aid of archivists, librarians, scholars, and collectors, the editors are most grateful.

THOMAS A. EDISON PAPERS STAFF (2007)

Thomas A. Edison Papers
at
Rutgers, The State University of New Jersey
endorsed by
National Historical Publications and Records Commission
18 June 1981

The original documents in this edition are from the archives at the Edison National Historic Site at West Orange, New Jersey.

ISBN 978-0-88692-887-2

Thomas A. Edison Papers

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PART V
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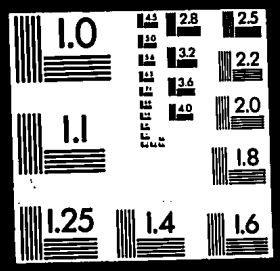

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